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HOW TRADE INCREASES.

The Houston, Stanwood & Gamble Company, manufacturer of steam engines and boilers, of Cincinnati, Ohio, under date of October 9 in a letter to the MANUFACTURERS' RECORD says:

We are glad to inform you that our trade has been exceptionally good this year and shows a steady growth from year to year, having increased a little over 300 per cent. since 1898. We prize your paper very much because of the list you furnish us of new industries. Yours is about the only trade paper that we have advertised in continuously for a number of years. . . . We are pleased to report our collections, which are largely from the South and Southwest, have been very satisfactory, indeed, and that, taking it altogether, our fiscal year, which closed August 1, was a record-breaker for us.

Similar testimony from hundreds of others who for years have been regular advertisers in the MANUFACTURERS' RECORD tell the story.

CAMPAIGNING FOR CITIES.

If any of our readers failed to note carefully the exceedingly interesting letter of our special correspondent, Mr. George Byrne, in the MANUFACTURERS' RECORD of last week, in which he discussed the progress of Roanoke, Va., they missed an unusually interesting story. The general facts about Roanoke and about some peculiarly large industrial undertakings in that city are of interest, but there is one point in Mr. Byrne's letter that is well worth republication. It is thus:

But of all the possessions of this magic city, its most valuable is the spirit of public enterprise that animates the people. As

stated above, the Chamber of Commerce is actively at work for the city. It is advertising its advantageous features in many ways and accomplishing much in attracting men and money. But it is doing more. It is binding together in bonds of friendship the men of different callings who already live here, so as to finally have a citizenship homogeneous in thought, animated with the spirit of confidence and trust that makes men true neighbors with one another. In too many cities the members of boards of trade and chambers of commerce, while working absolutely for the good of the community, do so with an air of exclusiveness that makes all others feel like standing aloof, and finally renders the organization unpopular at its own home. Here the Chamber of Commerce invites the co-operation of all other organizations in the city, and does it in such a way that the others feel like joining with them in anything that means the good of the city. A few weeks ago the Roanoke Chamber of Commerce gave a "smoker," to which were invited more than 50 leading members of the various labor unions. These guests came, and the consequence was a general exchange of views, a forming of lasting friendships and a general knitting together of different classes of men whose interests are identical, but who all too often are kept apart by misunderstanding, to the great detriment of all. Now every organization of men in this city is vying with every other one to see which can do the most for its advancement and upbuilding. Employers and employees are friends and neighbors in the best sense, and everybody is the better for it.

The youngest and one of the best of the important cities of the Old Dominion, the history of Roanoke should be an inspiration to the people of other communities.

We have recently published a number of letters describing how commercial organizations on the Pacific Coast were uniting all of the people of their communities in a broad campaign for material upbuilding, but in none of the Pacific Coast cities was there found a more interesting story of what is being done than this of what the Chamber of Commerce at Roanoke is accomplishing. If the people of all classes, of all callings, can be brought together, as stated by Mr. Byrne, into "a citizenship homogeneous in thought, animated with the spirit of confidence and trust that makes men true neighbors with one another," if the business men and the leading men of the various labor organizations can be joined together in lasting friendship through such an organization as the Chamber of Commerce, and their interests united for the advancement of their city, surely there is inspiration here for every community in the South. What Roanoke has done is well worth a trial, and an honest, square trial at that, by every other community.

POSTAL SANITY.

The announcement by Postmaster-General Meyer that he would recommend no increase in the rates on second-class mail matter is gratifying, not merely to the publishers of periodicals, but to a much larger number of persons who understand that second-class matter is in reality one of the greatest revenue producers for the Postoffice Department, and who are opposed to the scheme of placing the newspapers of the country under the domination of a bureau of the General Government in

the pretense of increasing postal revenues. The Postmaster-General epitomized a great amount of common sense in the statement that the Postoffice Department is not a money-making concern, does not have to render a cash dividend to its patrons, but does seek to render the best kind of dividend to the people of the country by its service.

All discussions of postal reforms emanating from a recent regime in the Postoffice Department have turned upon the notion that for some reason or other the Postoffice Department should be a money-making institution. While the distinction in that particular among the different branches of the Government service should be made for the Postoffice Department has never been clearly shown, the continued agitation for "reform" involving unwarranted control of the newspapers has led the people of the country to fear that the whole movement for reform has been a cover for irresponsible limitation of the freedom of the press. Therefore, while congratulating Postmaster-General Meyer upon the eminently sane determination, the people of the country should see to it that no Postmaster-General in the future shall have any reason to reverse that determination.

THE SUN STILL SHINES.

In the latter part of 1902 and the early part of 1903 pessimism swept over the country; railroad managers were forced to curtail their improvements; bankers, taking their cue from Wall Street, could see nothing but disaster ahead. The average business man of that day fully answered to the description of a pessimist, namely, "one who, given the choice of two evils, gladly takes them both," or that other description, which says that "a pessimist is one who, if a cruller is held before him, sees only the hole." And yet that pessimism was without any real foundation. After the storm was over people wondered why they had thought the sun would never shine again.

We are in some little danger of similar pessimism, but we should remember that the sun is still shining, the Wall Street clouds will soon be over, and it will not be long before every industry of the country will be overtaxed more than ever to meet the demands of an ever-growing country. We are apt to forget now, as we did then, the expanding power of a country of 85,000,000 people, increasing at the rate of 2,000,000 a year; a country which has seven times as much coal area, and probably several times seven times as much actual coal, as all Europe; a country which controls the world's cotton trade; a country which is now growing about \$7,000,000,000 a year of farm products and turning out \$18,000,000,000 a year of manufactured and mining products. We cannot stop growing. There are 85,000,000 people to feed and clothe and transport up and down the country—85,000,000 people whose wants are ever increasing and whose abilities to supply their wants are constantly growing. The

thing which was a luxury yesterday is a necessity today. Even now, notwithstanding the note of pessimism heard in Wall Street (and Wall Street still labors under the impression that it is the real center of the country as it was years ago), railroads are overcrowded with freight and cannot give quick delivery.

In the North and West, as well as in the South, the lack of transportation facilities is one of the pressing problems of the day. A great increase in rolling stock and in trackage is necessary, but for the time being railroads are unable to find the money with which to finance these much-needed improvements. They must go on, therefore, struggling against the heavy load of doing more business than their facilities enable them to handle promptly. Increasing trade demands a great increase in the facilities for taking care of it. Wall Street is for the moment filled with pessimists, and railroads for the time being cannot secure the money needed for expansion, but these conditions are of necessity more or less temporary. It is quite true that railroads will have to pay a higher rate of interest for money than in former years. More than two years ago the MANUFACTURERS' RECORD pointed to this coming change and predicted a large decline in the value of fixed income securities and an increase in the cost of money to investors. This has come about, and the railroads must of necessity adjust themselves to it. They will do this, and when the agitation against railroads and the cry for decreased rates pass away the money will doubtless be obtainable. With increased cost of money and of operations, railroads must be given the opportunity, if necessary, to increase rather than decrease rates.

It is true that money cannot be had at present, but it is not conceivable that the people of the country, who are very properly bitter in their denunciation of the misdoings of some railroad managers, are going to make it impossible for the railroads to secure money necessary to provide increased facilities. Such a policy would be as foolish as the denunciation of all church organizations because some church members have turned out to be thieves. As the great majority of church members are honest, so the great majority of railroad men, and of all other business men, are honest in their intentions and their work. There is no more misdoing among railroad people than among other classes of business men.

As soon as this temporary agitation—for temporary agitation it must be—has been succeeded by the sober, common sense of the people there will come a new period of railroad construction, and to the business activity which we are now enjoying will be added a vast expansion of railroad interests. No one imagines that American development is going to be halted; no one imagines that the magnificent progress which this country has so long been making is to be checked, and so while the pessimist

here and there may be in the ascendancy at the moment, his day must of necessity, by virtue of the solid foundation on which American prosperity is building, be short-lived. The next advance movement will exceed that of late years as much as that has exceeded the activities of 10 or 20 years ago. Then men—great, broad men, equal to the responsibility of this new order of things—will be more difficult to find than capital.

A BANKER ON BANKING ADVERTISING.

At the annual meeting of the American Bankers' Association at Atlantic City a very interesting address on the importance to the banks and trust companies of a broad and continuous advertising campaign was delivered by Mr. F. Phillips of the Lincoln Trust Co. of New York. Speaking from the experience of his company, he said:

A very few years ago we discussed the propriety and dignity of advertising for banks and trust companies. Today, please note, so progressive are we that the discussion is upon new methods of advertising and their results. But that the times change is not a fact of so much moment as that we change with them. In these days advertising of some kind is as much a necessity to your business enterprise as your electric light and your typewriter; you can do without them, but how much better can you do with them. * * * The best results are to be obtained, in my opinion, by a judicious combination of personal representation and newspaper advertising, supplemented by attractive circulars and well-typewritten letters in good English. Advertising cannot be considered a science, as many of its enthusiastic advocates assert; very far from it. That is to say, it is governed by no natural laws. You cannot apply to it the yardstick or the balance, measuring off so much and thereby achieving fixed and definite results to be calculated in advance. Failure to appreciate this is largely responsible for disappointment among those who find advertising not to pay. Nor is advertising a game of chance. Advertising is really an art, and, like all good art, based on scientific principles, and the governing principles in the case of advertising are chiefly psychological, the working of the average mind under varying conditions. Hence, while results from advertising may always be obtained, entirely successful results can only spring from the exercise of good judgment based upon a certain amount of experience which may have cost money, and upon a sound knowledge of men, more or less instinctive. Apart from the testimony of my own experience, convincing to me at least, I can only say that it is my belief, and I find myself well supported, that the vast increase in bank deposits and the widely extended use of trust-company facilities during the past few years is in no small measure the direct results of the new activity in financial advertising. The privilege of small checking accounts has tempted thousands to do business with the banks who formerly carried their funds in their pockets. From safe-deposit vaults, too, money has been drawn for equally safe and more profitable lodgement in the bank, and unless you are acquainted with the business you would be astonished to know how much money is thus locked up. From other hiding places and for various reasons small sums, but in the aggregate an enormous amount, have been drawn to find protection and productiveness in the banks of the country, thanks to advertising. * * * In my scheme of educational advertising I would teach the principles upon which banking is founded; I would teach discrimination between the various classes of institutions; I would teach something of the principles of investment; I would teach the protection and the profit afforded by our banks and trust companies, and I would devote especial attention to our legal safeguards and to our moral and financial responsibility; I certainly would not advertise my resources as so many millions without stating my liabilities. This educational advertising is being carried on by certain individual institutions, with results that far exceed the most legitimate and hopeful expectation. The best form of educational advertising that I ever saw applied to a bank statement was a fac-simile reproduction of the bank's report to the Comptroller; the next best was a condensed statement in which the various items were described and defined for the benefit of the public. * * *

In closing this address, which should be read by every banking officer in the country, Mr. Phillips quoted from the *Wall Street Journal*, with strong approval, the following:

Have the bankers tried in any adequate way the method of advertising in order to teach the people the value of saving and the principles of investment to inspire that confidence which should exist between them and the bankers? Certain bold and unscrupulous speculators and many adroit unscrupulous promoters have not hesitated to use liberal quantities of printer's ink at great expense in order to secure that publicity necessary to get control of other people's money. Are our legitimate bankers to leave to these speculators and promoters this invaluable field of publicity? They, indeed, advertise now, but they do not advertise with that boldness and resourcefulness and power of expression which is necessary to gain the attention and inspire the confidence of readers.

There is no more reason why the dry goods house or the grocer, the automobile manufacturer or the breakfast food purveyor should advertise than why banks and trust companies should be regular and persistent advertisers. They are seeking public co-operation. They not only desire to enlarge their business, but they need to make the public fully understand the safety of banking and the wisdom of dealing with reliable banks and trust companies. The points made by Mr. Phillips are well worth the careful thought of all bankers. If trust companies in a great financial center like New York find regular and persistent advertising—advertising which is carried on year after year as one of the necessary expenditures of the company—profitable, how much more important is it that banks and trust companies throughout the country should follow the same wise policy.

TWO SIDES OF A CASE.

Mr. J. E. Horne, a farmer of Waco, Texas, in a letter to the MANUFACTURERS' RECORD says:

I wish every farmer in Texas would subscribe to your journal. It is an education in itself. I cannot get along without it.

The policy of the MANUFACTURERS' RECORD is an effort to be educational in its work. It believes in full and frank and free discussion of the great questions of the day. It does not expect all of its readers to agree with its views.

In another letter to our *Southern Farm Magazine*, received in the same mail, a New Jersey subscriber to that publication says:

I will hail your monthly welcome, as I always like to learn of opinions contrary to my own.

The New Jersey subscriber takes the right position. No man is well educated who knows only one side of a case. In the great questions of vast moment of the day no man is able to reach a proper decision unless he does see both sides fully and frankly discussed. Hence, the MANUFACTURERS' RECORD in its work endeavors to throw some light upon all the important business questions of the day, with special reference to those that bear particularly upon the material interests of the South. There has been sweeping over the country a spirit of hostility to railroads. This is not surprising. The railroads themselves and their managers are very largely responsible for it. The MANUFACTURERS' RECORD is not in any way whatever attempting to defend the misdoings of the railroads or other corporations, but it recognizes the fact that in the creation of a public sentiment hostile to railroads we are destroying the temple of our own prosperity. If the people at large would come to a fair and honest recognition of the shortcomings, the sins

of omission and commission of themselves, as well as of others, they would probably be inclined to be a little more charitable and less inclined to bitterness in their denunciation. As the MANUFACTURERS' RECORD has often said before, the farmer who packs the best of his fruit at the top of the barrel or crate for the purpose of deceiving the buyer and selling it at a higher price because the buyer cannot see the bad fruit inside is just as much a thief at heart as the most corrupt corporation manager. The man who seeks by one means and another to avoid the payment of his five-cent fare on the street cars, or of a larger fare on the steam road, is just as much to be condemned for dishonesty as the man who mismanages a business enterprise, whether railroad or otherwise, for his own profit and to the injury of others. Both should be punished. They are equally guilty. But why should just retribution to such people take the shape of laws to hamper and restrict railroad operations, by reducing rates, when not lower rates, but more transportation facilities, is what we need so badly.

SMALL BANKS IN THE SOUTH.

How rapidly and extensively the banking facilities of the South have grown within the last seven years is shown, at least in part, by a recent bulletin issued by the Comptroller of the Currency. This reveals incidentally the great increase in the number and total capitalization of national banks in the 14 Southern States, especially of small banks in country towns and villages, many of which places were without banking accommodations before the establishment of these financial institutions. The bulletin does not, however, give figures on State banks or trust companies, of which there is a large number in the South; in fact, there are no complete figures concerning such institutions, as all the States do not keep statistics concerning the banks chartered by them.

The total number of national banks now in the South is 1421, and their total capital is \$154,066,735. More than two-thirds of this number, or 959, have been established since the approval of the act of March 14, 1900, which permitted the organization of national banks with less than \$50,000 capital. The total capital of these comparatively new banks is \$54,723,500, of which amount \$39,315,000 represents 383 banks with capital of over \$50,000 each, the remainder of \$15,408,500 being distributed among 576 banks with capital of less than \$50,000 each. These latter figures indicate very plainly the Southern demand for national banks with capital of between \$25,000 and \$50,000, and how well it is being supplied.

Small national banks are numerous. In Texas, for instance, out of a total of 392 national banks organized since the act of 1900, there are 275 of the smaller class. In Kentucky, out of 74 so organized there are 49 of the little ones. In Virginia there are 43 out of 69, in Alabama 34 out of 63, in West Virginia 33 out of 62, in Georgia 32 out of 64, in Maryland 27 out of 38, in Tennessee 24 out of 42, in North Carolina 20 out of 35. Yet in some of the Southern States the little national banks are in the minority. State banks or trust companies of small capital affording banking facilities to communities which would not support institutions of large dimensions. Thus in Mississippi there are only 3 small national banks out of a total of 18 organized since 1900, in

South Carolina 4 out of 14, in Florida 9 out of 25, in Louisiana 10 out of 27, and in Arkansas 13 out of 33. It is probable that with the steady increase of population, commerce and industry in these States the number of national banks therein will increase. There would no doubt be more of these now but for the fact that \$25,000 is the smallest capitalization permissible for a national bank, and consequently if a bank is needed and that amount of capital cannot be secured a State charter is sought and a bank with less capital is organized. Not a few State banks have capital of only \$5000 each.

The financial columns of the MANUFACTURERS' RECORD reflect the growth of banking in the entire South. To meet the needs of business new financial institutions are being organized and incorporated every day, and for several years there has been not only no abatement in the average number of banks formed each week, but, on the contrary, there has been an increase. It is furthermore gratifying to observe that, notwithstanding the large number of banking charters and incorporations, the number of institutions which have liquidated or else gone into receiverships is exceedingly small.

LEMUELQUIGGISM.

That it is an ill wind that blows no good has been emphasized by the revelations of traction deals in New York city. Shocking as these have been to the moral sensibilities of the great mass of the American people, accustomed in ignorance to regard Greatness in the metropolis of the country as something really great and not as a Dealer upon the credulity of the people, the shock is really compensated for in its making possible for the American people to comprehend the real character of much of that which passes for healthy public opinion in New York city and to get on to the real schemes underlying the myriad organizations created there ostensibly for the most altruistic purposes, and upon that basis appealing to enthusiastic ignorance in other parts of the country for moral support and for promotive cash. The shock will not have been in vain if it opens the eyes of the people and keeps them open to the significance of the ease with which the names of Great and Good men in and near New York may be assembled upon the stationery of almost any kind of "uplifting" project floated in the metropolis, the ease being so great and the use of the names so wholesale as beguilers of cash and credit from others that it is impossible for the owners of the names to be acquainted fully with the uses to which their names may be put.

This phenomenon had come to be known as sociology. The Interborough Metropolitan stench has given it a better name. For Lemuel Ely Quigg is only one of many professional "accelerators of public opinion" operating in New York or in other parts of the country with financial assistance from New York. His duplicates are found among the child-labor agitators, the exponents of divers health fads, the exaggerators of the horrors of typhoid fever, tuberculosis, etc., and the promoters generally of social "reforms" so stringent that the plain man cannot but wonder how, in the absence of such salaried "accelerators of public opinion" in the past, the globe has not long since become an uninhabited waste.

Presently, though, it is hoped that the intelligence of the American people, aroused by the revelations of the New

York traction scandals, will be able to identify lemuellquiggism wherever its head appears and so cease to give any heed to the "uplift" projects engineered and financed from New York, no matter how specious their guise and no matter how well-meaning ignorance of a community may be victimized by hired "accelerators of public opinion."

BURBANKING COTTON.

As one reads on another page of this week's issue of the MANUFACTURERS' RECORD the interview of Albert Phenix with Luther Burbank and gains an insight into the nature-nurser's experiments and achievements, one might well wish that Mr. Burbank could find time to devote a few months to a special study of cotton with the purpose of hastening the revolution which the world is awaiting and which will happen when something like the methods of wheat harvesting may be applied to the gathering of the cotton crop. During the past four or five years a number of distinct efforts have been made to place upon a commercial basis in the cotton fields a mechanical picker, reducing the number of human beings necessary to harvest the cotton. These efforts have been welcomed by the MANUFACTURERS' RECORD as indicating a strongly-developed tendency to solve the problem mechanically, but at the same time it has felt that the revolutionizing process will not be fully developed as long as invention clings to the notion of actually picking the cotton in the fields. It believes that the revolution is to be effected through the evolution of an idea involving the gathering of the cotton by the wholesale, just as the wheat is garnered and just as the beginning has been made in reaping corn.

Nature has already given the hint for the use of some Burbank. Three or four years ago an early frost nipped the tops of cotton plants in Northern Texas and in the Indian Territory. This nipping hastened the maturing of the bolls, but just before their full maturity and when, according to the accounts at the time, the bolls had, because of the nipping, matured pretty evenly upon each plant, came a killing frost. Many growers believed that the crop would be a dead loss. But a certain embryo Burbank, acknowledging the hint of nature, crudely adapted his wheat thresher to the situation and, reaping the plants, sent them through the machine. Results were so satisfactory that his example was followed by many others to the end that about \$2,000,000 worth of cotton was saved, even though in a damaged condition.

Attention was directed to this experiment by the MANUFACTURERS' RECORD and an effort was made to interest experiment stations in the cotton belt in the idea of so treating the growing cotton plant upon the lines suggested by the frost as to possibly bring all the bolls upon each plant to maturity at practically the same time, thus permitting it to be reaped mechanically and then sent through what was suggested as a thresher gin, combining the movements of threshing and ginning. It was not imagined that it would be possible to bring all the bolls to perfection simultaneously, but it was argued that if this could be done as to the great majority of bolls on the plant, the economies induced by the mechanical harvesting would justify sacrificing the unripened bolls in the harvest. Scientific experiments with the cotton plant, however, have been concerned principally with cultural methods, and there-

fore it is understood how difficult it is for the experimenter to get away from the question of culture and to fix his mind upon mechanical treatment of the plant. But it is believed that the idea is worth consideration, and, in the belief that the man who will solve the problem of picking cotton mechanically will overtop all others in the world as a benefactor of his kind, the MANUFACTURERS' RECORD again reiterates the hope that the Burbank in cotton may shortly be forthcoming.

THE FOREIGN SPINNERS.

With a day spent at Memphis on October 16 the two weeks' visit to the South of representatives of European textile interests came to an end. Leaving Atlanta last Thursday morning on their special train of the Southern Railway, they journeyed through Alabama, Mississippi, Louisiana, Texas and Arkansas, being greeted on every hand with hospitality and wherever time permitted being entertained, as at Birmingham, New Orleans, Galveston, Houston, Texarkana, Little Rock and Memphis, at banquets or luncheons and being given opportunities in automobile trips to gain a hasty knowledge of the respective cities and their surroundings. In Mississippi the visitors spent two hours and a half on the cotton plantations of Mr. J. A. Crawford at Heathman, where they inspected the growing cotton at close range, and at Dunleith, in the same State, several of the party left the train for the afternoon and rode over the plantation, rejoining the others at Greenville the next day. Governor Blanchard of Louisiana came down to New Orleans to welcome the visitors on behalf of the State and held an informal reception just before the luncheon, which was spread in the big dining-room of the New St. Charles Hotel. Addresses were made by President William M. Smith of the Cotton Exchange, Mr. Charles Janvier, Governor Blanchard, Mr. J. R. Barlow, Manchester, England; Mr. Arthur Kuffler of Austria, Mr. J. R. MacColl of Massachusetts, former president of the National Association of Cotton Manufacturers, and Mr. William Howarth of Lancashire, England. Acting Governor X. O. Pindall of Arkansas was among those who greeted the foreigners at Little Rock.

TO RECLAIM 7,000,000 ACRES.

At the organizing meeting last week at New Orleans of the Louisiana State Drainage Association plans were formulated for the reclamation of 7,000,000 acres of swamp land in the State. Mr. Edward Wisner of New Orleans, in a practical talk on the benefits to be derived from the undertaking, said that by reclaiming the wet land the wealth of the State could be doubled. Less than 1,000,000 acres, he said, will more than duplicate the sugar, rice and truck crops of the State, 2,000,000 acres will be more than enough to double the cotton crop, and 500,000 acres would be sufficient to cover every other agricultural product. Even then only half of the wet lands would be utilized. He contended that there is money enough, energy enough and foresight enough in Louisiana to drain the marshes and swamps, thus enabling Louisiana to reap the full reward. Another general meeting of the association will be held in January, and in the meantime the following will serve as officers: Messrs. Albert Godchaux of New Orleans, president; Henry L. Gueydan of Gueydan, vice-president; A. J. Mann of New Orleans, secretary and treasurer, and Edward Wisner of Orleans parish, O. W. Crawford of St. Charles parish, Albert Estopinal of St. Bernard parish, Charles Matthews of Lafourche parish and John Dymond, Sr., of Plaquemine parish.

THE ONE MEANS FOR IMPROVING WATERWAYS.

[Special Correspondence Manufacturers' Record.]

Chicago, Ill., October 14.

In view of the great importance of the development of the water transportation systems of our country, and especially in view of the fact that President Roosevelt at the recent convention at Memphis expressed himself so heartily in favor of the Government performing its duty of deepening and otherwise improving our waterway system, your correspondent called upon Mr. Albert H. Scherzer, who has devoted the greater part of his life to the study of the development of waterways in the United States and abroad, and therefore can speak with authority. Mr. Scherzer said, in part:

"It is my opinion that there is only one way to solve this problem satisfactorily, and that is for the Government to issue not less than \$500,000,000 of bonds as needed for the immediate improvement on a large and comprehensive scale of all of our national waterways. It is admitted by well-informed people that the railroads of the United States are totally unable to transport the products of our mines, manufactures and farms expeditiously and economically, and the idea has been advanced, very sensibly, I believe, that our waterways should be made deep and navigable in order that the congestion on railroads be relieved of the lower class of freight tonnage, which, if removed economically, will develop and build up manufacturing and other industries.

"Foreign countries appropriate annually large sums of money for the development of their waterways, notably Germany and France, and largely pay for such permanent improvements by bond issues. It seems to me that the President of the United States is the trustee, so to speak, of our vast undeveloped national waterways, and I was indeed glad to hear him at the convention express his mind so clearly and positively as to it being the duty of the Federal Government to immediately improve these very important but heretofore neglected national resources. It is clear to everyone that if the United States Government attempted to construct the Panama Canal by direct taxation without bond issues its completion would be indefinitely postponed.

"The deepening of the Mississippi and its tributaries and the opening of a deep waterway from the Great Lakes to the Gulf of Mexico will undoubtedly be of greater value to the people of the United States than the construction of the Panama Canal. If the Government of the United States can afford to spend \$300,000,000 or more on only 45 miles of waterway at Panama, located entirely within foreign territory, it would seem to be self-evident that the Government of the United States can afford to spend \$500,000,000 or more for the improvement of the more than 30,000 miles of waterway within the United States entrusted by the people to the care of the Federal Government.

"During the past five years the able and energetic men entrusted with the management of our railroads have expended billions of dollars in the improvement of the properties entrusted to their charge, while in the same length of time the amount appropriated by the Federal Government for the improvement of all of our rivers and harbors in the United States is so small by comparison as to be insignificant, and, as a matter of fact, the total amount appropriated by the Government since its foundation for all the rivers and harbors in the United States amounts to less than the estimated cost of the Panama Canal alone.

"President Roosevelt has taken the

most comprehensive view of the entire subject, and has indicated his appreciation of the stupendous value of improved waterways. The people of the United States have suffered great losses from the frequently occurring floods caused by the neglected condition of our waterways. The floods in the Mississippi valley alone make practically useless more than 80,000 square miles of the most fertile and desirably located land in the world. The mere reclaiming of this fertile land alone will more than pay the cost of a deep waterway from the Great Lakes to the Gulf of Mexico.

"From time immemorial the Nile river has been regarded as the most valuable property or asset of Egypt, but its value is very small in comparison with our great Mississippi and her tributaries. The Nile river is considered so valuable that the British Government has already expended many millions of dollars in its improvement, with the result that the cultivatable lands in Egypt have been increased to more than 8000 square miles, thereby vastly increasing the wealth and general prosperity of Egypt. It is not difficult for anyone to foresee the great benefit and prosperity that would result from the reclamation of 80,000 square miles of such fertile, readily accessible land as we have in the Mississippi valley.

"In view of the fact that Congress so promptly responded to the President's request for funds for the building of the Panama Canal, it is within reason to believe that Congress will as readily respond to a request from the President for the funds necessary to improve the great waterways within the United States. In permitting the issue of Government bonds for the construction of the Panama Canal Congress undoubtedly recognized that a bond issue was the only proper course to pursue in the making of such permanent improvements as the construction of waterways. More than 100 years of experience in attempted waterway improvements by the Federal Government in the United States has clearly demonstrated the fact that such improvements cannot properly be made by periodical appropriations largely dependent upon whether there is a surplus or not in the treasury. If these waterway improvements in the United States were paid for by bond issues, the same as the building of the Panama Canal is being paid for, a comparatively small annual appropriation would be sufficient to pay the interest charge and provide a sinking fund sufficient to retire the bonds within a reasonable time. The Government and people of the United States would obtain the benefits from the improvements in a much shorter space of time, and future generations would be enabled to share in the cost as well as enjoy the benefits. Whenever waterway improvements are made on a large and comprehensive plan they are of the most permanent and enduring character. They are useful not only for a generation, but for thousands of years.

"It would have been impossible to build the railroads of the United States without issuing bonds, yet a railroad is of much less enduring character than an improved deep waterway. The rails and ties are constantly wearing out and deteriorating under traffic, and must be replaced. This is not the case with a navigable waterway.

"The United States has been singularly fortunate in the possession of great natural waterways. Since the disposal of the public lands the waterways are the most valuable remaining asset of the Federal Government, yet they are today in almost

the undeveloped condition in which Nature has furnished them to us. Every other form of property within the United States has been highly improved and developed. Why should there be any further delay in improving the waterways of the United States, when there is such a tremendous demand on every hand for improved transportation facilities?

"Canada, unfavorably located as to climate, and with a population of only 6,000,000 people, has already constructed a deep waterway from the Great Lakes to the sea, and has improved the St. Lawrence river so that large ocean vessels can navigate the same to Montreal. If a country so unfavorably located and with such limited resources and wealth can make such great improvements in its waterways, it would seem that equally great or greater results can be achieved in the improvement of the waterways of the United States if Congress provides the necessary funds to enable the President to solve this great problem in the energetic manner in which he has solved the Panama problem."

JOHN GLASS.

FOR WEST VIRGINIA.

Proceedings of the State Board of Trade.

[Special Cor. Manufacturers' Record.]
Elkins, W. Va., October 11.

The third annual meeting of the West Virginia Board of Trade was held in this city this week, and proved at least equal in point of attendance and general interest to either that has gone before. The local Board of Trade and the citizens generally had made every arrangement to take care of the delegates and render their visit and stay pleasant, as well as to furnish every facility for transacting the business of the meeting. Ex-Senator Henry G. Davis, president of the State Board, and Senator Stephen B. Elkins threw open their commodious and hospitable homes to the visitors, and evinced the keenest interest in making the meeting a success. Vice-President Charles Warren Fairbanks was present and delivered an address at the opera-house on Tuesday evening, and also talked briefly to the meeting of the board on Wednesday morning, on both occasions saying many helpful and encouraging things. Mr. W. L. Hall, of the Government forestry department, also delivered an address at the opera-house on "The Appalachian Forest Reserve," giving some valuable figures and relating some interesting facts with respect to the important question of properly preserving the forests and preparing for their renewal.

The first session of the board was held at 1.30 Tuesday, when, after a few appropriate remarks by President Davis in calling the meeting to order, the formal address of welcome was delivered by Hon. C. W. Dailey in a felicitous manner, and responded to with equal felicity by Harry G. Warfield of Morgantown. The report of the committee on membership was made by W. B. Mathews of Charleston, recommending for membership the Gassaway Board of Trade, the Clarksburg Board of Trade, the West Virginia Pharmaceutical Association, and for honorary membership Hon. W. P. Hubbard of Wheeling and Hon. George C. Sturgiss of Morgantown. The report was adopted. The secretary read his annual report, which showed considerable work accomplished during the past year, especially worthy being the enactment of a pure-food law and the securing of a State appropriation for an exhibit at Jamestown, due to the work of the legislative committee. The committee on manufactures, through its chairman, George Byrne of Charleston, made a report which dwelt upon a number of things in the State to which the attention of men of means and experience

in various lines of manufacture should be directed. Hon. W. P. Hubbard, for the committee on waterways, submitted a report of what was being done in the matter of deepening the Ohio, and recommending the passage of a resolution declaring that appropriations for waterway improvement should be made a regular thing and not be left to personal whim or political expediency, requesting the Speaker of the next National House of Representatives to appoint a West Virginia representative as a member of the rivers and harbors committee. The resolutions were adopted.

On Wednesday at the morning session ex-Governor White, who is now State Tax Commissioner, read a paper on "Limitation of Tax Levies," a question of great interest and importance under the tax system recently adopted in the State. Though issue was taken with the ex-Governor by Mr. Hubbard of Wheeling and Mr. Werniger of Huntington upon some of the conclusions drawn by him, his address was found very interesting and instructive by most of those who heard it. Vice-President Fairbanks spoke briefly and was introduced to most of the members when the meeting took a recess for dinner. The report of the committee on agriculture was read by Prof. James H. Stewart of the State agricultural experiment station. The report dwelt at length upon the neglect of the people of the State to take advantage of their agricultural opportunities, and showed that, with all their boasted eminence in coal production, the value of the agricultural products is largely in excess of that of coal—about \$70,000,000 against about \$45,000,000 annually. This report also discussed some phases of the forestry question in their relation to the agricultural interests of the State, and dwelt also at some length upon the road question, which is of vital importance to the farming interests. Prof. Henry Mace Payne, who is at the head of the department of mining and engineering, recently added to the State University, read an interesting paper upon the aims and objects of that department. He said the demand for mining engineers was such that it could hardly be supplied, and that the new department was especially designed to fit young men of the State for a calling that would demand increasing numbers of those specially fitted for the work for many years to come. The classes would, he said, be given practical instruction in the nearby mines, thus giving them much better opportunity to learn than could be afforded by mere theoretical instruction. H. E. Williams, State inspector of roads, read a well-prepared paper on "Some of the Difficulties of Road Improvement" that told many of the needs of the State in the matter of road legislation.

One of the most interesting addresses of the meeting was that of Governor Dawson, who spoke on "Some of the Needs of West Virginia." The Governor treated of many things that had been done and could be done for the good of the State, and among others called attention to the need for more small farmers and truck-growers. He told of coal companies in the Kanawha region who shipped potatoes from Michigan by the carload, when there was soil in this State specially adapted to their cultivation, and which should be so utilized. He said there were many hundreds of thousands of dollars sent out of the Kanawha valley annually for truck of various kinds to the growing of which the broad bottoms of the Kanawha were finely adapted, and urged the business men to encourage the establishment of trucking as one of the chief industries of the State. He also spoke of the duty of business men to take more interest in the politics of the State and to

save the Government from falling into the hands of those who seek nothing but their own personal advantage. Other matters of importance were treated at length, but these two were found more especially interesting by the Governor's auditors.

George Byrne, in a speech warmly commending that of Governor Dawson, urged members to take home with them the advice he gave, declaring that no two subjects of greater importance than those of small farming and the business man in politics could be mentioned, the one for the material welfare of the State, the other for the safety and perpetuity of its institutions.

Clarksburg was chosen for the next meeting place, and the time fixed for some date after the election next year.

On motion of the Wheeling Board of Trade, made through its representatives, the constitution was amended so as to enlarge the membership of the State Board by admitting individuals and firms, and in other and less important particulars.

The following officers were chosen for the ensuing year: President, ex-Governor A. B. Fleming of Fairmont; delegate at large, Hon. Henry G. Davis of Elkins; vice-presidents, two from each congressional district—first district, C. S. Smiley, Clarksburg; W. D. Alexander, Moundsville; second district, H. R. Warfield, Morgantown; W. H. Cobb, Elkins; third district, E. C. Colcord, St. Albans; W. O. Abney, Charleston; fourth district, W. W. Jackson, Parkersburg; R. I. Pemberton, St. Marys; fifth district, B. E. Abbott, Huntington; Dr. G. T. Epling, Keystone; general counsel, Hon. W. P. Hubbard, Wheeling; assistant general counsel, Hon. George E. Price, Charleston.

After the passage of resolutions of thanks to those whose efforts had made the meeting a success the board adjourned.

Back-Filling of Trenches.

President George C. Warren of the Warren Brothers Company of Boston, Mass., in an address recently before the annual convention of the American Society of Municipal Improvements in Detroit, called attention to the lack of proper supervision in the back-filling of trenches in streets, the effect this has on the proper paving of the street and the great amount of ultimate damage which usually follows from this neglect. He stated that having had 25 years of experience in street paving throughout the United States, he has met the matter of back-filling of trenches in about all of its possible phases, and appreciated that it was a most difficult matter to draft a specification which will give both efficient results and have a basis of payment for the work which will insure the greatest practicable economy to the city and fairness to the contractor. The greatest difficulty, he pointed out, arises from the fact that the method of treatment and cost thereof vary very widely with the character of the subsoil, which often varies very greatly within the limits of one sewer, water or gas-main trench. This often cannot be foreseen, and often varies with the weather conditions which happen to prevail. He cited a number of instances which have come under his personal notice where various bad results came from the improper filling of trenches, and some of them, too, after a lapse of a number of years. To overcome these defects in the back-filling of trenches he recommended that in case of permits to public-service corporations, plumbers and abutting property-owners to cut into the streets, that it is only necessary to stipulate in the permit that "the trenches shall be back-filled by such means as the City Engineer may direct, depending on the character of the excavated material, in such a manner that all excavated material

shall be replaced in the trench without raising the grade of the roadway. Flushing will only be permitted in cases where the subsoil is sand or gravel or other material from which the surplus water will readily drain away, and in the case of concrete or brick sewers or pipe sewers, the joints of which have been made watertight with bituminous cement pipe jointing cement."

In the case of contract work for sewers, etc., he explained, the case is more difficult, in view of the necessary uncertainty of conditions to be met underground and consequent uncertainty of the most economical way to properly "back-fill" the trench and consequent impracticability of the contractor accurately figuring in advance what the cost per linear foot will be. On this account some contractors are sure to bid far too low to permit proper work, and others figure "safe" with the probability that if they receive the contract the total price will be too much above the estimated cost. In one case the city has the almost impossible task of forcing the contractor to do proper work at a loss. In the other case the city will pay too much for the work. An effort should be made to avoid both evils.

To overcome these difficulties he recommended that the prices be divided in such a way that whatever material is encountered a fair price will be allowed the contractor at no loss to the city. The plan of getting bids in this manner was outlined in detail, so that every kind of subsoil likely to be encountered was covered and the back-filling of the trenches properly provided for.

Kentucky Oil Fields.

[Special Cor. Manufacturers' Record.]
Barboursville, Ky., October 4.

Barren county, one of the oldest oil fields in the country, but one which has been dead for many years, is to be subjected to new punctures. The Airline Oil Co., a new concern composed of Arkansas capitalists, has acquired a large acreage in the vicinity of Glasgow, and is making arrangements to drill a series of test wells. Other oil concerns have been looking over the field and taking leases, and if good results attend the initial efforts at restoring the production of the field a great revival of activity is expected.

The Knox county oil field is also being subjected to some new test work. The Cumberland Gas Co. of this city has let contracts for the drilling of five 2000-foot holes in the Cumberland river section. This is the most important work of the year, and the progress of the drill will be followed with the closest attention by those interested in that end of the Kentucky petroleum fields.

In upper Kentucky a rich wildcat strike in Bath county has set a number of rigs to moving, and the situation in that section is encouraging. The New Domain Oil & Gas Co., Lexington, Ky., made an excellent strike in an 1800-foot sand last week, and territory in the vicinity of the strike is in great demand.

The record of development work shows an expansion of the industry in the State. During September 23 strikes were made, with a daily capacity of 346 barrels. When the high grade of oil is taken into consideration, the figures indicate a prosperous condition of the industry. During August there was a total of 19 strikes, with a daily production of 141 barrels. It is estimated that 60 rigs are now up and in operation in the 11 counties connected by the Standard Oil Co.'s pipe lines.

The prices on Kentucky crude oil are 27 cents per barrel more than those quoted at this time last year. The better grade commands \$1.20 per barrel and the inferior grade 75 cents per barrel.

W. S. HUDSON.

Coal and Timber Lands an Index of Prosperity.

[Special Correspondence Manufacturers' Record.]

Middlesboro, Ky., October 11.

Conferences with real-estate dealers whose operations cover several Southern States, added to familiarity through personal experience with conditions in Kentucky and in parts of Tennessee and Virginia, reveal no reasons for discouragement about the real-estate business as concerned especially with coal and timber lands. Developments in both Eastern Kentucky and Western Kentucky are progressing with a rapidity that should satisfy anyone. Very few large tracts of coal and timber remain to be discovered, as it were, and but probably half a dozen tracts of virgin timber underlaid by from three to five workable veins of coal are yet to be found. These lands lie back from the railroads at distances of from 60 to 100 miles. Good lands ranging in area from 1000 to 10,000 acres and lying within reasonable distance of transportation facilities can be secured at prices of from \$7 to \$50 per acre. Coal lands in Western Kentucky with convenient railroad facilities can be bought in tracts of from 10,000 acres down for an average of \$20 an acre.

Lands are being much sought after all over Kentucky, and the best of the white oak and poplar lying within reach of shipping points is already taken. The Clearfield Lumber Co. of Clearfield, Pa., has recently bought a large tract of timber in Morgan and Rowan counties, on the north fork of the Licking river, and is building a spur track to it. Work is being pushed on the railroad, and the company needs 100 more laborers. Land in Eastern Kentucky from which the timber has never been cut has been priced as high as \$20 an acre, though located 20 miles from any railroad.

In Tennessee there remain very few available tracts of timber lands, though coal lands of almost any area can be purchased. Probably three tracts of 100,000 acres remain available in the State, and a few tracts of between 100,000 and 50,000 acres. But the majority of the available tracts of timber land are of 15,000 acres or less in area. Of course, tracts are offered freely by land agents, but that is no criterion of the actual supply. The demand for timber is great, and is increasing. The prices three years ago were considered high, but they are now two or three times higher, and three years hence timber will be selling by the tree for its true value. Hardwood timber that will cut 6000 to 8000 feet may be had now in Tennessee and North Carolina at \$15 per acre and upward, but such opportunities are fast becoming scarce. It is evident, even to the casual observer, that present conditions in Tennessee and North Carolina are such as to put the pessimist entirely out of the running. Business is good, and is getting better. And the supply does not increase in the same ratio as the demand.

In South Carolina and Georgia the price of finished lumber has been slightly less this summer than in the corresponding period last year, when the purchases comprised large lots. But business has begun to open up and the prices have risen. The crops are good all over the South, and there is every reason to believe that all kinds of business will be stimulated as soon as same is marketed. Long-leaf yellow pine is becoming very scarce. Many counties in Georgia, where it was plentiful some years ago, have not 100 acres together anywhere, and where it is found in 25 and 50-acre tracts it is eagerly bought up by owners of small mills. The short-leaf pine can be very profitably handled, and the waste timber brings \$2 to \$6 per

cord as firewood. This last is an important item. A large deal was consummated during the latter part of September, in which were involved 40,000 acres of Florida lands. The J. P. Williams Sand Co. of Tallahassee, Fla., sold the property to a New York syndicate for \$300,000 cash.

Inquiries for hardwood timber become more and more frequent daily and come from all over the country. The increasing number of veneer plants and the success of these in operation has caused this activity in hardwood timber lands. The farmers of the South have an \$800,000,000 crop to dispose of this fall, and a good proportion of it is in the Southeastern States. Business is good now and all mechanics, carpenters, etc., are employed. What will be the result when the impetus of this vast amount of money is felt? Labor is already too scarce for the work on hand, and some means must be found to enable labor to accomplish more with the same efforts.

Indications of continued prosperity which are found in the South Atlantic States are found in Missouri, Kansas and Arkansas also, a distinctly better tone in all business lines in these States being noticed. While the demands for Kansas lands is not as great as heretofore, the business is still gratifying. Far-seeing stockmen of the East and the North have concluded that Missouri and Arkansas have been much neglected. There are

thousands of acres of hill lands covered with sparse growth of hardwood timber which affords pasturage for multitudes of sheep, cattle and mules. Many of these tracts are being fenced up, and as they abound with pure spring water they make fine ranches, and, being located close to Kansas City and St. Louis, are accessible to market at all times. Missouri is pre-eminently a clay and mineral-bearing State in the Ozark region. In the vicinity of Versailles, Morgan county, are to be found the best kind of fire clays, and there are also plastic clays in abundance suitable for pottery ware. To these resources are added immense deposits of cannel and bituminous coal, the facts concerning which tax the credulity of the uninformed. There are deposits of this coal actually 72 feet thick, and deposits 40 and 50 feet thick are common. Many tracts can be secured for development, and a great deal of capital is now being turned in that direction. Opportunities for profitable investments are plentiful in the States mentioned.

The general outlook all over the South is good. With their resources practically untouched and with good results shown, what can we expect when the Southern States come into the heritage which is theirs for the taking?

The writer desires to thank Messrs. James A. Harley of Sparta, Ga.; Robertson, Anderson and Vaniedoe of Knoxville, Tenn., and Harlan A. Young of Versailles, Mo., for courtesies extended to him in connection with the preparation of this article.

JOHN HOWARD, B. S.

How Luther Burbank Heeds Nature's Whispers.

By ALBERT PHENIS.

[Written for the Manufacturers' Record.]

To have seen Luther Burbank and his wonderful nature laboratory, to have talked with him and been given even a fleeting glimpse of the marvelous things he is doing and has done, is an experience worth a trip across the continent, is a privilege men have gladly traveled round the world to obtain. Mr. Burbank is so busy every minute of his time that he has found it necessary to deny himself to well-nigh every one of the throngs which make the trip to Santa Rosa nearly every day in the year in the hope of an interview with him and a visit to the garden and the farm where his wondrous works are wrought. Neighbor and foreigner are treated just the same, for while the dwellers in Santa Rosa have, with few exceptions, never seen the Burbank grounds from the inside, those who come from abroad—one man I heard of having traveled all the way from Australia especially to see Burbank and his place—are no more certain of getting past the "No Trespassing" sign unless bearing a visé from someone on whose judgment Mr. Burbank relies. Letters and telegrams are no sure means of opening up the avenues of approach, for it would take as many stenographers as are employed in a good-sized mercantile house to answer all the various kinds of communications Mr. Burbank receives, and after disposing of tens of thousands of inquiries by means of a circular-letter it sometimes happens that letters and telegrams meriting a reply must lie for six months before time can be found for even a brief reply. A clause in the circular-letter signed by "The Friends and Relatives of Luther Burbank" contains this picture of previous distress:

"Over 6000 visitors were received on the grounds during the year 1904. All the important experimental work was delayed beyond recall, grounds overrun with

crowds from daylight to 10 o'clock at night, no rest even on Sundays or holidays; business destroyed, rare plants died from want of care; attention constantly drawn from legitimate matters, letters neglected, telegrams delayed; meals taken standing, sleep disturbed, health at the point of destruction, visitors calling at all hours without regard to Mr. Burbank's convenience, each one being under the fixed and unalterable impression that he or she was the one particular one who should be admitted.

"The question arose, Should he continue his valuable researches undisturbed, or should he be murdered piecemeal as a showman?

"This notice will now be found at every gate:

"POSITIVELY NO VISITORS ALLOWED.

"WARNING!

"ANY PERSON ENTERING OR TRESPASSING ON THESE GROUNDS WILL BE PROSECUTED."

So it is no degree of churlishness that shuts Mr. Burbank in from the world outside, but only the requirements of a very unusual situation, for while Mr. Burbank is undoubtedly one of the busiest men in the world, he is likewise one of the most famous, and were the bars let down the dire disaster pictured in the circular would doubtless speedily come to pass, and utter destruction of the man and his plant would follow on unchecked invasion by the curious multitudes.

The interest in the man and his work is emphasized by the fact that Santa Rosa is on a branch line of railroad 50 miles north of San Francisco and off the main line of travel, so that something of a journey must be made in the way of a special mission by practically every one of the

thousands who go there in the hope of seeing him and his place. Annoying as it works out in practice, it is still an eloquent tribute to the interest the whole world feels in the man and his work.

It had been arranged that I should see Mr. Burbank, but for "five minutes only," as a secretary had written. At the door of his neat new home—built from the proceeds of the sale of one of his spikeless cactus leaves, I had previously been informed—a secretary reiterated the warning that no more than five minutes was to be taken of Mr. Burbank's time. In the modest library I met Mr. Burbank, a seemingly shy, average-sized man, with silvered locks and a smooth-shaven face that lends itself to a strikingly impressive photographic reproduction. In conversation, though wholly free from self-assertiveness, Mr. Burbank at once showed the mastery he feels of himself and the field in which he has achieved such pre-eminent success, and there were flashes of the remarkable eloquence and deep learning that illuminate his written pages. At the outset Mr. Burbank spoke of the embarrassment he had experienced through having writers unfamiliar with horticulture attribute statements to him which were inaccurate and which brought thousands of inquiries that could not be ignored. He also expressed great displeasure at having been called a wizard, when he was merely a horticulturist, working along purely scientific lines, which had nothing of necromancy or the black arts about them.

A question as to the practical commercial value of the work he has done and is doing brought a quick invitation to accompany him through his garden, a four-acre tract across the street, on the edge of the city, where he located in 1875 on his removal to California from his native State of Massachusetts. Here a rapid review of trees, shrubs, plants, vegetables and flowers was made, Mr. Burbank volubly summarizing the history of the more important experiments in hand, and more than 15 minutes had passed and the four acres had been walked over before he called an assistant to take his place and excused himself on the ground of being unusually pressed for time on account of the absence of several helpers that day.

While 15 minutes gave a most valuable and instructive glimpse into some of the important Burbank achievements, it would take vastly more of his time to rehearse even the greater feats that have marked his 40 years of endeavor, and the benefits he has conferred on mankind could not be enumerated in a massive volume. Plants were Burbank's childhood playmates, and the Burbank potato, now grown universally and increasing by untold millions the value of the potato product of the country, was an achievement of his boyhood days. Vegetables, plants, fruits, flowers, grasses and grains to the number of thousands have been given to the world in improved form, some of them constituting a distinctly new species, a veritable creation. All over America and in every part of the civilized world nurserymen, seedsmen and florists to the number of tens of thousands propagate, introduce and distribute his productions to the public. Rarely does Mr. Burbank undertake to deal directly with the purchaser. He simply experiments till a species or a variety has acquired fixed characteristics, and then he turns it over to the seedsmen, nurseryman or florist and takes up something else.

One exception to this rule is the spikeless cactus. In it Mr. Burbank sees almost illimitable opportunities of a revolutionary character, and he has not parted with this production to the middleman. For 12 years he has been experimenting with the cactus. As in all of his experi-

ments, he has brought varieties and species from every State in the Union, and from all parts of the globe where they grow in native state, and by processes of selection, crossing and elimination has progressed till a fixed thornless cactus has been produced that will withstand heat, cold, drought or moisture; that will flourish in good soil or in gravelly river beds and on barren hill and mountain sides or rock piles; that from the first year's planting will yield 90 to 100 tons of fodder to the acre, and thereafter, under favorable circumstances, 200 to 300 tons, and that produces enormous quantities of delicious fruit as well, sometimes as much as seven pounds to one of the leaves. As free from spikes as the rind of a watermelon, anything will eat the cactus—"anything from a canary bird to an elephant," as Mr. Burbank graphically said, and he described how a cow that had been fed one of the slabs or leaves tried to break the fence down to get at the rest of the plant. It is also declared that the young leaves make excellent pickles, and are a good and wholesome food for humans when fried like an eggplant. They can also be boiled and used as greens, and when prepared with sugar produce a sweetmeat similar to citron, and may be flavored with ginger and other spices. The fresh fruit—the "prickly pear" without the "prickles"—which in some varieties grows as large as a banana, is marketed at the same price per box as oranges, and in addition to being eaten raw is made into jams, jellies and syrups. In the Southwest a manufacturer has put on the market a cactus candy, which is very generally in demand and quite a popular novelty.

The hardness of the plant is uniquely interesting. It is propagated from cuttings of the leaves. They must be wilted first to insure the best results. Therefore, as Burbank says, "you can put it in your overcoat pocket, throw it behind the kitchen range, lay it on the roof or on your desk—anywhere—and it will make roots and grow, and it will flourish if you plant it right side up, upside down, on its side, or simply throw it on the ground."

It is Burbank's idea that this cactus will be as great a boon to the arid regions of the world as ever irrigation has been, as it will support animal and human life in vast areas which are now but barren wastes. As a beginning in the way of demonstrating this proposition, a company with a capital of \$250,000 has been formed to introduce the plant into a section of the Southwest. It is currently reported that \$16,000 was paid by this company for four of the slabs or leaves which were obtained.

All through his talk with me and in the selection of productions he chose as subjects for comment and elucidation Mr. Burbank seemed to be answering the query as to the commercial value of his work—not aggressively, nor in the spirit of one having accepted a challenge, but rather after the manner of Cornelia, stretching out her hands and saying, "these are my jewels."

"Here is a variety of rhubarb which produces all the year," he said at one pause in the journey round the home place. "The leaves are simply stripped from the stalk as they mature, and then more leaves keep on maturing. This rhubarb has been the foundation of several fortunes made in Southern California."

"One of the greatest canners of vegetables in the country, a man in Colorado, has asked me to produce a variety of peas that will give at maturity a small pea, like the French pea, and I am at work on that proposition here," he said, briefly pausing at a bed where peavines were growing.

"This is a thornless blackberry bush," he said again. "Rub it on your face and

you'll find it as soft as velvet." And, lifting up a branch of leaves and stalks, he rubbed them on his cheeks with manifest delight.

Passing poppy beds and banks of almost innumerable flowers, which each received a hurried word as to what had been achieved in the way of increased size, hardihood, prolificness, color or ornateness, Mr. Burbank led the way to his hybrid walnut trees, about which I had heard and in which I had expressed an interest. Growing on the outside of the place, in the hard dirt of the road, were a number of beautifully-foliaged trees, some 50 feet in height and having trunks 18 inches or so in diameter. "These are a cross between the California and the Eastern walnut," he said, "and you will see by a comparison with the trees on the other side of the street that they will grow more than twice as fast as the ordinary walnut. My trees are 14 years old. They are larger than the others at 30 years."

"This was a visible fact, and a sawed board from one of the Burbank felled walnut trees showed the wood to be of most beautiful texture, grain and color, admirably adapted to interior finish of the finest sort and for expensive furniture. A California company is now engaged in propagating these trees."

From Mr. Burbank's talk, from his assistant's further elucidation and from pamphlets I afterward obtained, many other most interesting facts were secured regarding the work of Luther Burbank and its value to the world. Only the briefest reference can be made to it here. It may be doubted if the story in its entirety ever will be told. It would take a second Boswell, and one with a genius fitted for this great task, to give a faithful record of all the achievements Burbank has made and has yet in store. He himself is preparing for publication 22 volumes of books, and they, in addition to what he has printed in the way of pamphlets and addresses, and what has appeared in newspapers and magazines about himself and his work, will give some idea of what his efforts mean to the world. But how can all the results of 40 years and more of such endeavor as his be chronicled in all the volumes now in sight? Who is there, with all the data that can be obtained, who can adequately portray the infinite patience and the marvelously delicate skill with which he has wrought, and what kind of a niche must be provided for him in the history of all the coming thousand years? He who has caused two blades of grass to grow where only one grew before is proverbially regarded as a benefactor in his time. How infinitely more so the man who has added to the manifold productiveness, usefulness and attractiveness of a thousand forms of vegetable life. If he had done nothing more than produce the Burbank potato, with its present probable addition of 20,000,000 bushels to the crop every year without extra effort or extra cost, he would have conferred a vast benefit to not those alone who live today, but would have bequeathed a beneficent legacy to every man, woman and child who ever shall inhabit the earth.

But this was the mere beginning of his task—the preparatory school for his really serious work. By his achievements up to date it would almost seem that he had resolved the entire vegetable kingdom into its original elements and held in his hands the destinies of all vegetable life. When he made the "black" berry white and robbed the prune of its pit he manifested in but inferior degree the power he holds over vine and tree and flower. New species are summoned into being at his command, and even theories of evolution and the origin of species are affected by the achievements he has won. Weeds he con-

siders only waifs that have been denied surroundings that would make them useful to the world, and he sees in corn a kinship to the grasses that he proposes to trace back to its source. The Aztecs or other early peoples America contained had bred it up from a state where the grains grew on the tassels alone, he maintains, and he is breeding back the corn, past the age when every kernel was encased in husk, to the condition of its primitive form. This in the expectation of finding opportunity in some of the mutations it may pass through for a new departure along lines that will be of commercial value to the world.

Many grains and grasses have been improved under his hand, and in all his experimentations it has been his aim to improve the quality, the hardness and the prolificness of the article in hand.

In the way of flowers a whole world of achievement has been gained. More startling results have been secured here in number and in kind than in any other field, and in nothing does Luther Burbank take greater pride. He has made of the Shasta daisy something akin to a snow-white chrysanthemum of dazzling brightness. The California poppy has been made to leave its former orange and take a crimson hue. Callas have been made yellow and also striped, and innumerable simple flowers have been changed into compound forms. Inherent perfumes, as well as colors, shapes and habits, have been modified and wholly changed until there would seem to be no limit to the results to be attained.

Luther Burbank is so practical a man that he has made a competence, even while never losing sight of his experimentations. He is so pre-eminent in his line that he has been provided with \$10,000 a year for 10 years by Andrew Carnegie to help him in his work. He is so scientific and scholarly a man that he is not only familiar with the theories of Darwin and those who wrote before him and have written since, but in his own writings and addresses he discloses a profundity of research and investigation, along with an originality of conclusions, that place him among the greatest scientists and philosophers of all time. The plants and flowers have whispered all their secrets to him, it would seem, and for him Nature has removed her veil.

A Virginia Museum.

In their latest report the trustees of the Valentine Museum at Richmond, Va., emphasis is laid upon the neglect in the past of books, papers and objects of interest bearing upon the history of the Commonwealth and the opportunity which the museum offers for prevention of regrettable results from a persistence in the neglect. The report truly says:

"Not only in Richmond, but throughout Virginia, there are many objects of interest put aside and going to ruin which should be preserved. They belong to the history of Virginia, and should be placed in a museum where all students of her history could study them and strangers to her civilization and culture be enlightened. Many possessors of articles believe that they appreciate them, and do not wish to give them up, yet keep them packed away in trunks and closets, do not see them once in 10 years, never show them to their children or explain their history, and with the death of the owner all knowledge of them will be lost. In the museum the articles would be displayed, the donor's name being associated with the exhibit would be remembered, the history of the objects would be recorded and friends and relatives and future generations would take pride in pointing out that the donor had saved from sale or destruction and

preserved in a Virginia institution the heirlooms of his family or the interesting objects he had collected. The old civilization of Virginia is passing away, and if we would not have it misunderstood or unappreciated it is essential that we should preserve all records and letters and objects throwing light upon the high state of culture and refinement, the industry and achievements and the daily life of our forefathers."

Nearly 26 pages of the report containing the printed list of donations to the museum during the past two years indicate that the patriotic desire of the trustees is meeting the response that it deserves. What is being done in this way for Virginia should be done for every Southern State.

Seeking an Eastern Location.

Advices have been received by the MANUFACTURERS' RECORD regarding an important manufacturing enterprise seeking to establish a plant in the East. The enterprise commands a trade, and the possibilities for a demand in the East make it desirable to have a factory there. The company states that about \$500,000 worth of orders can at once be filed by an Eastern plant, and asks certain subscriptions to its stock for investment in the new branch, the management to remain with the investors. The Luitwieler Pumping Engine Co. of Los Angeles, Cal., is the principal referred to, and states it has an auto fire apparatus which fully meets requirements. Its equipment carries 50 horse-power, the hose, the chemicals and chemical hose on one car with six men, the total weight being 5000 pounds. Correspondence can be addressed to S. W. Luitwieler, president of the company.

Hawkinsville.

The spirit of progressiveness that is being shown by many cities and towns throughout the South in making their advantages widely known is evidenced in an interesting pamphlet illustrative and descriptive of the resources, development and opportunities for settlement and investment that are centered in Hawkinsville, Ga. The city authorities have ordered 8000 copies of this pamphlet distributed through the Board of Trade, which in addition encloses a card offering to pay the railroad fare of all those in the surrounding territory who purchase goods over a certain amount.

Norfolk's Wood-Vulcanizing Plant.

Referring to the article in last week's issue of the MANUFACTURERS' RECORD bearing upon the plans of the National Wood Vulcanizing Co. of 52 Broadway, New York, to establish a wood-vulcanizing plant at Norfolk, Va., the MANUFACTURERS' RECORD is informed that the patent rights of the Howard process are not owned by Capt. D. G. Purse of Savannah, Ga., and Prof. I. H. Woolson of New York, as stated, but are controlled exclusively by the National Wood Vulcanizing Co.

The Cotton Movement.

In his report for October 11 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 41 days of the present season was 1,418,079 bales, a decrease under the same period last year of 285,558 bales. The exports were 624,008 bales, a decrease of 153,143 bales. The takings were, by Northern spinners, 125,385 bales, a decrease of 32,040 bales; by Southern spinners, 298,504 bales, an increase of 6112 bales.

It is estimated that about \$25,000,000 will be added this year to the total assessed value of property in Arkansas.

Making Bridges and Structural Steel for the South.

[Special Correspondence Manufacturers' Record.]

Roanoke, Va., September 28.

One of the most widely known enterprises located here is the Virginia Bridge & Iron Co., a concern that typifies the hustling and active energy of this young giant of Virginia municipalities. I visited the company's plant, and found there not only much to interest me personally, but much also to help to explain the won-

derful growth and industrial progress of the city. And I found also that, though he was a very busy man, President C. E. Michael was not too much absorbed with his duties to show me about the premises and explain something of the work being done.

The plant covers about 12 acres, and lies northeast of and adjoining the great foundry of the Norfolk & Western Railway recently completed, and for which this plant furnished and erected about 1200 tons of structural steel. The offices of the bridge company are in a large and commodious three-story brick building, modern in its appointments and fitted up with an eye single to the comfort and convenience of the many men employed in it. On the first floor are located the executive, engineering, contracting and accounting offices, while the second floor is occupied by drafting offices, the third floor for making blueprints and for filing purposes. The rooms used by the draftsmen are well lighted by means of many windows in the daytime, and at night by electric lights, with adjustable fixtures by which the light can be thrown to any part of the drawing boards.

In a brick building 60x120 feet in area, which stands just east of the office building, are located the offices of the shop superintendent and timekeepers, and here is found also the templet shop. Here are made the patterns by which the various structures are modeled, and the shop is fitted for the purpose with planers, band and circular saws, lathes, boring machines and trimmers, all driven by independent electric motors.

Immediately east of this building, and extending from the north to the south boundary of the property, is the receiving runway, about 700 feet long. On this runway are two 10-ton 70-foot-span electric cranes for unloading material from the cars, distributing same from the assorting beds over the stock yards, and for serving the marking shop and sheds with material. East of this is located the powerhouse, a building of brick and steel throughout, 84x75 feet, with concrete floor. In this building the company has a complete duplicate power plant. In one wing is a 400-kilowatt motor generator set, and the 2200-volt current received from the Roanoke Water-Power Co. is converted

into a 240-volt direct current, which is used throughout the plant in the independent motors and for the lighting system. In here is located also a direct-connected air compressor of 2000 cubic feet capacity a minute for use in various machines about the plant. In the other wing of this building is located duplicate steam power, so that in case of a breakdown in

the way in which the various parts are assembled, riveted together and passed on from stage to stage, each particular part engaging the attention of just enough men to finish it at the exact time when the force just ahead of them is ready to receive it and the force immediately behind ready to pass forward to them the next piece, forces upon the mind the perfection of the organization of the work. The foundations have been laid for a new marking shed and girder shop, which is shown in the diagram printed herewith.

the east end, are the forges and hammers, and the machine shop occupies the western end, which is equipped with planers, lathes, drill presses, boring machines, bolt and nut machines. All these machines, like those in other departments, are driven by independent motors.

West of all the buildings is the shipping and storage yard, which is served by one 30-ton and one 10-ton crane, with a runway 63 feet wide and 490 feet long. Here was seen the finished product being loaded on three tracks. A good view of this is



VIEW OF THE VIRGINIA BRIDGE & IRON CO.'S PLANT.

the power company's plant it is only necessary to fire up the boilers, turn the steam into the Harrisburg Crocker-Wheeler direct-connected engine and generator and into the three steam-driven air compressors, and no interruption of work occurs. The steam equipment is tested once each month to insure its readiness for use in case of need.

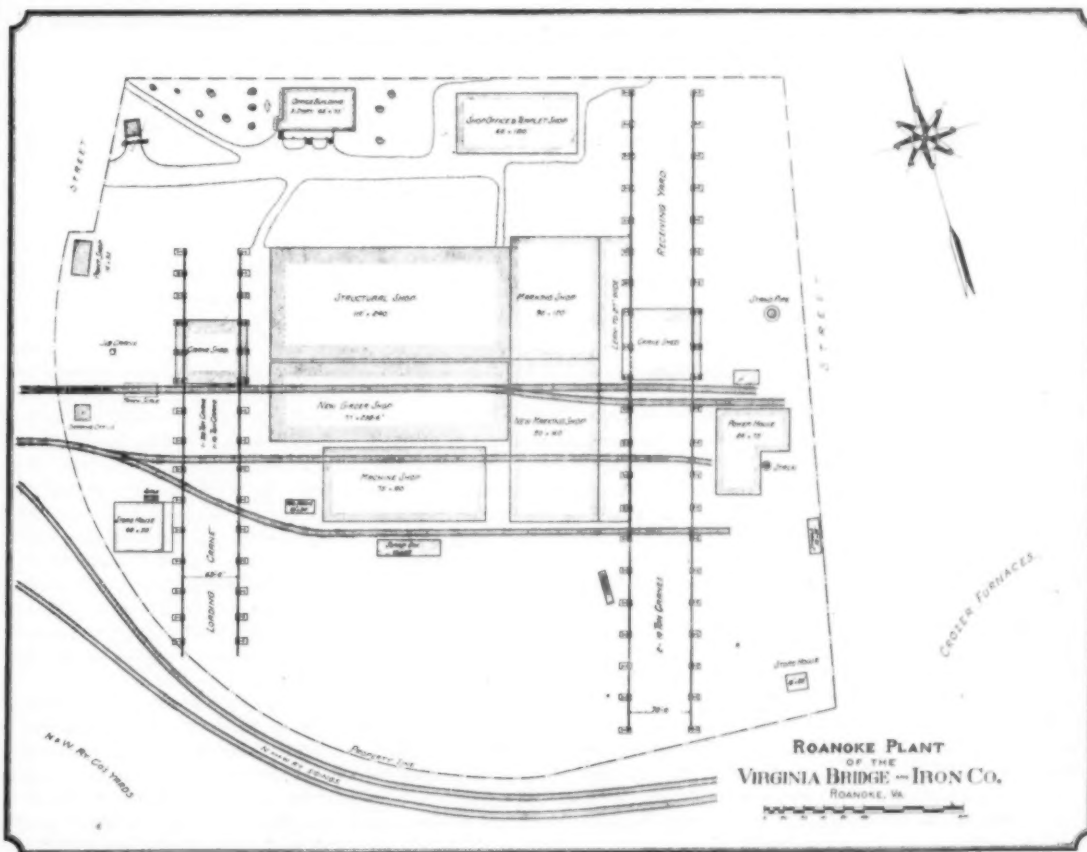
In these shops are massive shearing, punching and reaming machines, all driven by independent 240-volt motors. The riveters are worked by compressed air, the rivets being made in the building and distributed from the machine to the various heating furnaces direct.

The product is handled by 5 and 10-ton compressed-air and electric hoists, and

given in the photograph printed herewith.

West of this runway are the storehouse—for erection tools, such as rope, blocks and the like—the shipping offices, a steel jib crane for loading light material quickly, and the paint shop.

In these shops are employed 350 persons, and the output is about 2000 tons per month of finished product—bridges



The marking and structural shop is in a solid steel building 120x357 feet in size, and here is done the work that catches and holds the interest of the visitor. The great pieces of iron and steel are brought in here and the places for the rivet holes are marked. From the point of marking they are rapidly carried forward to be punched, riveted, milled and painted and loaded on the west shipping yard. To see

from them is handed over to the loading cranes for loading on cars. A feature of this shop is the rolling appliances for carrying the material through the shears, saws and punches to the assembling skids. All the skids in these shops are heavy steel beams on concrete foundations.

Just south of these shops is the blacksmith and machine shops, another steel building 75x160 feet. In this building, at

and structural steel. Especially impressive about the plant is the system that prevails, from the drafting-rooms through every department until the finished product is loaded ready for shipment. Each man seems to know exactly what his duties are with respect to every piece of material that comes to him, and quickly, silently, unerringly he attends to those duties; in fact, the whole force of the establishment

moves along with the precision of a great smooth-running machine.

The Virginia Bridge & Iron Co. has another large plant at Burlington, N. C., a town on the Southern Railway between Greensboro and Raleigh. The Burlington plant covers about 10 acres, employs 175 men and turns out 800 to 1000 tons of stuff a month.

The Virginia Bridge & Iron Co. is strictly a Southern enterprise, being a corporation controlled entirely by Southern business men. Its principal branch offices are located at New Orleans, in the Hibernia National Bank Building, and Atlanta, in the Equitable Building. It is constructing bridges and structural steel in all the States of the South and Southwest for the principal railroad, manufacturing and mining interests, and enjoys the patronage and the confidence of the Southern people generally.

The company has recently been authorized to increase its capital stock to \$900,000, but its present issued stock is \$660,000, all common. It has never issued any mortgage, securities, bonds or preferred stock. A recent issue of \$100,000 of stock for improvements was oversubscribed by those already stockholders. Its present

ON TOP OF THE OZARKS.

Springfield Utilizing Its Great Natural Advantages.

[Special Cor. Manufacturers' Record.]
Springfield, Mo., October 10.

Here is a city located in the center of Southwest Missouri on one of the highest plateaus of the Ozark mountain range at an elevation of nearly 1500 feet above sea-level, with a population of 45,000, 35 miles of paved and improved streets, nine banks with aggregate deposits of \$8,255,453.21, 135 factories with a value of \$10,201,000 output, 6521 hands employed, with an annual payroll of \$2,906,000, and with an assessed valuation of real estate amounting to \$12,261,240. Springfield's one railroad, the St. Louis & San Francisco's annual payroll here amounts to \$1,540,000. This, together with iron, zinc, lead, lime, building stone and clays, wheat, corn, oats, rye, fruits, in a rich poultry and dairy section, is the backbone of the city's growth within the past decade. Right well has Springfield utilized all of these great natural advantages. Awakening to the fact that all around her lay the raw materials, she soon became a center of manufacturing interest, and in this respect is not dependent upon other sections

is maintained. Among her many public structures are Government building, erected at a cost of \$150,000; a \$50,000 library; a \$100,000 theater; a \$50,000 high school; a \$35,000 club and \$150,000 Frisco Hospital. Springfield is proud of a splendid public-school system. She has one of the oldest and most splendidly equipped colleges of the West (Drury), with 500 students; a normal school six years old, with 700 students; two Catholic schools and two fine business colleges.

One of the largest improvements connected with the growth of Springfield is the building of the St. Louis & San Francisco Railway shops. When completed these shops will cost \$1,500,000, with plans for ultimate investment of nearly \$5,000,000. They will be complete in every detail. The space occupied by them will be some 27 acres.

Another very important element of Springfield's growth as a poultry market is her immense poultry houses, which do a business far exceeding \$1,000,000 a year. The "milk-fed" chickens of Springfield have a national reputation; they are sought after by the best markets throughout the country.

The Springfield Wagon Co., a large en-

The prize-winning corn at the Chicago World's Fair was raised near Springfield, and her winter wheat takes first rank wherever exhibited or marketed. The best land yields from 40 to 80 bushels of corn per acre, and 25 to 35 bushels of wheat. Here is also the natural home of the blue-grass. Live-stock of all kinds and of the best breeds are found in Green county. Excellent pasturage, short winters, even temperature and good water make stock-raising very profitable, and horses, mules, cattle, sheep, goats and hogs are all profitably handled and have made the Southwest Missouri farmer prosperous and contented. The conditions favorable for stock are also favorable for poultry-raising, and nowhere else is this industry carried on more successfully and profitably. Springfield has a large packing-house and three large poultry packing plants that have made this city the largest shipper of dressed poultry in the world. Twenty-three years ago there was not a commercial orchard in all this territory; today there are millions of fruit trees and thousands of acres of berries whose products not only go to the large cities of America, but to Europe as well, and yet the fruit industry is still in its infancy. So you will readily see we have much in and around Springfield to make her a large and growing city. I forgot to mention land that was worth 10 years ago from \$5 to \$25 per acre is now valued at from \$150 to \$500 per acre, and often yields in income for one year equal to the value set on it. From \$100 to \$500 per acre profit per annum on fruit and berries is the customary yield. Ten acres properly grown to fruit and berries will furnish a good living for a family, while 40 to 80 acres would support them in opulence."

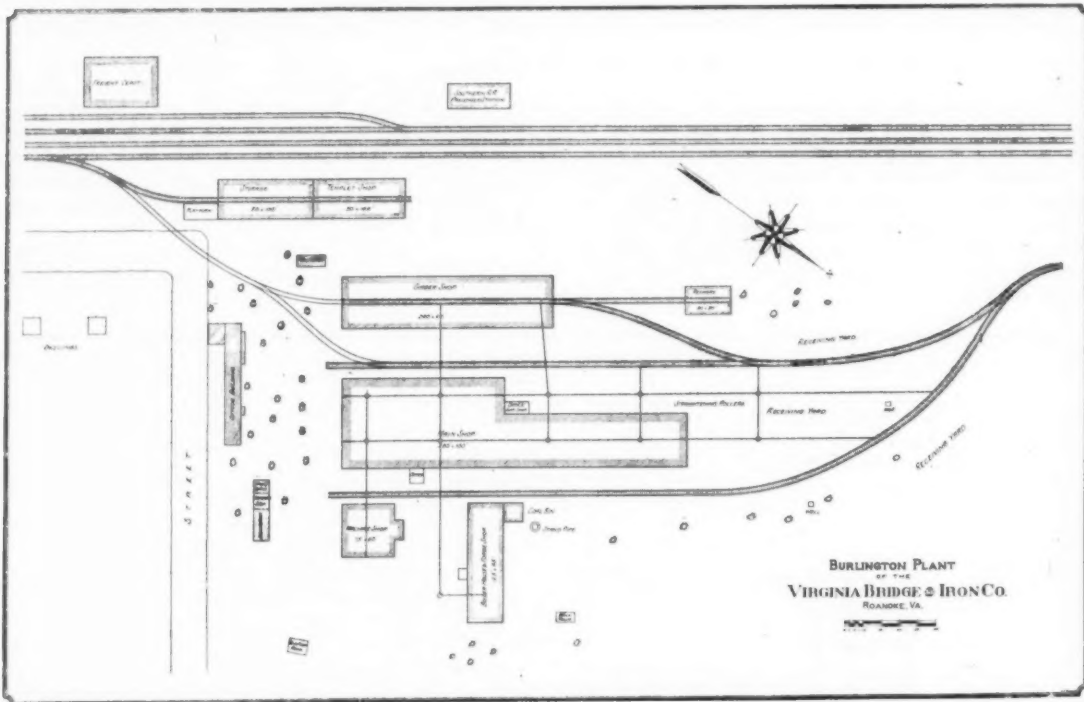
All indications point to a steady growth of this beautifully-located city. Conditions are all favorable. People are prosperous and progressive. Everybody pulls for Springfield. Taxes are low, being \$1.60 in the county and 90 cents in the city on the \$100. Valuations are assessed about one-third of actual value. Your correspondent learned from Messrs. A. W. Ollis & Co., one of the most reputable real-estate dealers in farm, fruit, timber, mineral and mining property, that more inquiries have been received during the past four months regarding Springfield and her adjacent territory than have been received in 12 months heretofore. This statement emphasizes the fact that Springfield is attracting the capitalists and manufacturers as well as the homeseeker, and the time cannot be far distant when the city of Springfield will double its present population. There is room here and a bright future, where the conditions and environments are manifestly promising for the energetic man who wants to use his capital, brains or muscle, and then, too, best of all, there is a hearty, courteous welcome awaiting all who may desire to come this way.

ALEXANDER HELPER.

Has Had a Steady Growth.

On October 8 the Washington *Herald* celebrated the first anniversary of its establishment by issuing an edition worthy of the event. In its first year it has attained a growth beyond the expectation of its promoters, who are sanguine that its succeeding years will show even greater progress. Its editor, Mr. Scott C. Bone, is to be commended for the zeal and ability he has displayed in promoting the interests of the paper.

The industrial and historical issue of the Mt. Olive (N. C.) *Tribune* is designed to give the homeseeker and prospective investor an idea of the great resources and advantages of Wayne county, and the purpose has been admirably carried out.



officers are C. Edwin Michael, president; T. T. Fishburne, vice-president and treasurer; J. B. Fishburne, second vice-president; J. L. Richey, third vice-president; John L. Parker, secretary and assistant treasurer; J. H. Whitner, contracting manager; J. K. Graham, general manager; A. Z. Drozdov, chief engineer; H. E. Obenshain, purchasing agent; directors, C. Edwin Michael, T. T. Fishburne, J. B. Fishburne, J. L. Richey, R. H. Fishburne, Edwin L. Stone, W. B. Beville, James P. Woods, Roanoke; Eugene Holt, Burlington, N. C.; E. P. Wharton, Z. V. Taylor, Greensboro, N. C.

This company has contributed much to the upbuilding of Roanoke, the third city of the State, whose population has increased more than 6000 during the last 15 months. It has also added largely to the business activity of Burlington, where some of its principal stockholders reside.

GEO. BYRNE.

The State Board of Appraisers of Mississippi have increased the assessments for this year of railway property by \$9,955,094, telegraph property \$346,106, telephone property \$1,227,305, sleeping-car property \$67,796 and express property \$121,000—a total increase of \$11,717,301.

outside of her own border for such things which she may just as well have at home. Springfield is a center of the great Frisco-Rock Island system, whose lines radiate in every direction. Twenty-six passenger trains arrive and depart daily, and fast freights rush produce and fruit to the world's markets. Springfield has 20 miles of electric city and suburban track, 52 miles of water mains supplying pure spring water, a splendid electric and gas plant supplying the city with \$1 gas. This city is a most convenient point for the distribution of manufactured products. Fuel and water are cheap and abundant; labor is of a high grade. Nearly all of her employes own their own homes and are interested in the growth and prosperity of the city.

Springfield is pre-eminently a residence city. Her beautiful location on top of the Ozarks, her invigorating climate and pure water have induced well-to-do and refined people to make this a city of beautiful homes. Wide streets, large lots, shady lawns and handsome dwellings impress the visitor with the fact that here is found refinement and culture. Springfield's people are cosmopolitan, coming from every section of the United States. Socially, educationally, religiously a high standard

enterprise, is unable to keep up with the demand made upon it, notwithstanding its output is from 6000 to 7000 wagons yearly. So it is with the Springfield Furniture Co.; it is rushed for orders, and the demand today is far greater than the supply. The United Iron Works, controlling seven different plants, manufacturing ice plants, mining machinery, cement-making machinery, is pressed in its work. It does a business of \$2,000,000 annually.

The jobbing business of Springfield has grown so fast of late that it now runs up to nearly \$12,000,000 annually, while the postal receipts, as given your correspondent by the postmaster, for the fiscal year ended June 30, 1907, amounted to \$100,000, an increase in five years of \$42,000. So large has the Government business grown that an appropriation of \$50,000 to \$75,000 has already been asked for.

In speaking of Springfield Mr. C. P. Ollis, the efficient and wide-awake secretary of the Commercial Club, said: "It is to be doubted if any similar area in the United States is capable of raising as great a variety of crops as Southwest Missouri, and the yield will compare favorably with the best anywhere. Corn, wheat, in fact, all the cereals flourish.

CURRENT EVENTS AS VIEWED BY OTHERS

WANING HARDWOOD SUPPLY.

[U. S. Forest Service.]

Although the demand for hardwood lumber is greater than ever before, the annual cut today is a billion feet less than it was seven years ago. In this time the wholesale price of the different classes of hardwood lumber advanced from 25 to 65 per cent. The cut of oak, which in 1899 was more than half the total cut of hardwoods, has fallen off 36 per cent. Yellow poplar, which was formerly second in point of output, has fallen off 38 per cent. and elm has fallen off one-half.

The cut of softwoods is over four times that of hardwoods, yet it is doubtful if a shortage in the former would cause dismay in so many industries. The cooperage, furniture and vehicle industries depend upon hardwood timber, and the railroads, telephone and telegraph companies, agricultural implement manufacturers and builders use it extensively.

This leads to the question, Where is the future supply of hardwoods to be found? The cut in Ohio and Indiana, which seven years ago led all other States, has fallen off one-half. Illinois, Iowa, Kentucky, Michigan, Minnesota, Missouri, New Jersey, Tennessee, Texas, West Virginia and Wisconsin have also declined in hardwood production. The chief centers of production now lie in the Lake States, the lower Mississippi valley and the Appalachian mountains. Yet in the Lake States the presence of hardwoods is an almost certain indication of rich agricultural land, and when the hardwoods are cut the land is turned permanently to agricultural use. In Arkansas, Louisiana and Mississippi the production of hardwoods is clearly at its extreme height, and in Missouri and Texas it has already begun to decline.

The answer to the question, therefore, would seem to lie in the Appalachian mountains. They contain the largest body of hardwood timber left in the United States. On them grow the greatest variety of tree species anywhere to be found. Protected from fire and reckless cutting, they produce the best kinds of timber, since their soil and climate combine to make heavy stands and rapid growth. Yet much of the Appalachian forest has been so damaged in the past that it will be years before it will again reach a high state of productiveness. Twenty billion feet of hardwoods would be a conservative estimate of the annual productive capacity of the 75,000,000 acres of forest lands in the Appalachians if they were rightly managed. Until they are we can expect a shortage in hardwood timber.

THE BILL OF LADING.

[Wall Street Daily News.]

If there is anything so vitally intricate about the construction of a bill of lading that will safeguard both shipper and transportation company, as well as the banker who accepts it as collateral, it should be pointed out at once. For a long time the bankers have been doing their best to obtain a change in the formation and wording that would protect them from swindlers, which have been altogether too numerous and outrageous to admit of calm acceptance. It would seem as though the railroads and the shippers would have been as anxious as the bankers to arrange matters to the satisfaction of all concerned, since it brings an advantage to all three. Up to recently, however, the bankers have preached and talked and argued practically by themselves, and the others have paid no heed to their contentions.

Even the threat by New York bankers to refuse in the future to accept any further bills, or to loan upon them, failed to move the others concerned, possibly because the interior bankers could not afford to make good their word. The bill of lading, while a financial instrument of great power in the country, is treated with amazing carelessness by those who handle them regularly. Whether greater scrutiny on the part of bankers would succeed in preventing many fraudulent attempts of this sort, or whether the fault lies with the companies or the shippers in not safeguarding their own interests more carefully, may never be fully settled. Since the loss usually falls upon the banks, however, it is from them that the greatest care should be looked for. The bankers themselves have reported losses exceeding millions of dollars which have never been publicly reported, and the losses which railroads may have sustained are never made known to any great extent unless someone starts digging for statistics upon which to base complaints against the existent conditions. Bills of lading will increase, rather than diminish, as an important factor in our national financial life as we grow in strength and importance. Because of their vital effect upon the crops and commerce of the country there should be no delay in reconstructing both the forms of the bills and the collateral used to attach to the bills. In Europe commercial paper is used as proper collateral, but with our "banker" bills the foreign markets look upon our exports as more or less speculative, and therefore do not purchase direct, but rather pay commissions to Liverpool and Bremen, especially in the matter of cotton purchases. The wonder of it is that there has been so much delay in the matter of reform, since there is no possible question in respect to the need thereof.

CRAZE FOR SENSATIONALISM.

[Lester's Weekly.]

The press of the United States and Europe was recently fooled by a hoax about the wedding of two centenarians in a Western city. The yarn was the work of an obscure Government clerk in St. Louis, and involved a money-making scheme. The credulity of the press and the public is amazing. Some time ago a leading New York daily printed a dispatch from a West Virginia village to the effect that a woman had mistaken a bear for her husband on the highway in the dark and had given her baby to the animal before she discovered her frightful mistake. The story was a fake on the part of the sender and a joke on its face, yet it found a conspicuous place in one of the ablest of our daily journals. Recently a new dispatch from Rockport, Texas, told of the struggles of a child that had been carried off into the bay by a string of toy balloons which she had grasped. This was another fake, yet hundreds of the great dailies in the country printed it without uncovering the fraud. In the eager desire to get sensational news common sense and caution seem to be entirely overlooked. We repeat that every great newspaper in these days ought to have a censor in the editorial department—wide-awake, conscientious, well-informed and tireless. The New York Tribune apparently has one properly installed, for recently, when most of its contemporaries printed a perfectly preposterous dispatch from Texas to the effect that the temperature in a part of Texas had reached 179 degrees in the

sun, the Tribune wired for information and readily learned that the story was a fabrication. Instead of printing the misleading information, the Tribune promptly denounced it as a "phenomenal temperature canard."

What can be expected in the way of reliability from our daily newspapers when some of the largest in the principal cities, claiming the highest advertising rates because of the value of their restricted space, devote columns in each issue to freak news of the most absurd character? * * * Not long ago one of the greatest dailies in the country had columns of "specials" continued for several days on the alleged discovery by an unknown crank in Pennsylvania of a method of burning ashes instead of coal. Recently several great dailies printed a dispatch to the effect that someone in a Western town had invented a liquid with which he could coat ice and preserve the latter indefinitely. It took but a superficial inquiry to develop that the ash-burning scheme was absurd, and on its face the ice-preserving invention strained credulity. Yet "news" of this kind is printed not only in great dailies, but such rotten stuff is telegraphed by press associations to their clients. It is not to be wondered at that the public lose confidence in some of the greatest of our daily newspapers.

A few weeks ago the finding of the hat and coat of a clerk in one of the greatest national banks in New York city was made the basis of an alarming rumor printed in nearly all of the New York dailies to the effect that the bank had suffered from a defalcation, and that one of its principal clerks was missing. It was added that the officers of the bank were diligently working all Saturday and Sunday to ascertain the extent of the bank's loss. A simple inquiry by telephone at the bank would have shown that the rumor was false. The bank was within a stone's throw of some of the newspapers that printed the wicked story, and a messenger could have traveled the distance in a minute or two, yet the reckless and injurious statements were printed and dwelt upon until the bank was compelled in self-defense to make public exposure of the falsity of the report. What would some of the newspapers that printed this story think if the bank should repeat over its counter remarks affecting the financial standing of any of them without taking pains to justify the suspicion?

The truth is that the newspapers of the country have been so carried off their feet by the wave of sensationalism now sweeping across the land that they have no time for research and no patience for investigation.

LOUISIANA ASSESSMENT.

[New Orleans Times-Democrat.]

The assessment of Louisiana, as finally completed and equalized by the Board of Equalization, shows a total of \$508,079,419, as against \$502,596,454 returned by the assessors and the appraisers, and \$459,273,771 in 1906. The board added \$5,482,965 to the assessment of the State, making the total increase over 1906 of \$48,805,648, or 10.5 per cent. This advance has brought out very few objections or complaints, this being evidence of the general improvement in the situation. When the work of equalizing assessments was begun it was met with almost universal protest, on the ground that it was a scheme to raise taxation. The reduction in the tax rate by the Legislature corrected

this false impression, and the work of equalization has since progressed most satisfactorily, the objection to it rapidly disappearing.

REAL ESTATE SIMPLICITY.

[New York World.]

Every time property is purchased or mortgaged it is necessary to conduct a search, which usually takes at least 30 days and entails much expense. When large tracts of land are cut up into several hundred building lots, as was the case when the Jumel estate was sold, and every purchaser employs an attorney to search the records, time and expense assume alarming proportions. Nor will a policy of insurance issued by a title company or a search conducted by an attorney prove available to any but the then owner. Over and over again must the musty records be overhauled with every succeeding transaction. It is a house-that-Jack-built extended ad infinitum.

The desirability of some system which will settle the matter once and forever is manifest. This the Torrens system does. The property-owner whose title is registered may take his certificate and effectuate sale or mortgage as easily as the owner of stocks or bonds. A title once registered is good as against all the world, whereas a deed at present is but the last link in a long chain of evidence.

The most careful search conducted with the greatest skill will not guard the purchaser against hidden defects, such as dower rights or the claims of undisclosed heirs. But these rights are absolutely shut off when a title has been registered. By this it is not meant that the victim of the error of an examiner is without remedy, since an insurance fund is created out of the fees paid by applicants, to which resort may be had.

An important point made by the advocates of the system is that it is not compulsory. No property-owner is forced to avail himself of its provisions. If he desires to continue along present lines and prefers that a search be made every time his property is transferred he is at perfect liberty to do so.

MAKE OF PIG-IRON IN 1907.

[London Iron and Coal Trades Review.]

It is perhaps not too much to say that the general expectation as to the make of pig-iron in 1907 has been that it was considerably in excess of that of the previous year. The figures which are published in another column show that this impression has only been partially justified. There has been an increase fully equal to that of the first half of 1906, but not equal to that of the first half of 1905. Nevertheless the advance has been at the rate of 578,576 tons a year, and this is a rate that has only seldom been exceeded in the history of the British iron industry.

A remarkable feature of the iron industry for the first half of the year 1907 has been the steadiness with which it has proceeded all over the period. The number of furnaces in blast has been larger than for some years past. The average output per furnace in the leading districts has continued to advance, but there has not been much change in the Midlands, where in such districts as Northampton, Derbyshire, Notts and Staffordshire the trade follows its customary course without any marked forward movement. The total make of British pig for the half-year has been at the rate of nearly 10,500,000 tons per annum. This figure compares with a corresponding make of pig in the United

States at the rate of about 27,000,000 tons for the year—exactly 26,956,000 tons—and an output in Germany of 6,355,953 tons, or at the rate of 12,711,906 tons. It would therefore appear that America is now producing pig-iron at the rate of 16,600,000 tons a year more than Great Britain, while we are nearly 2,500,000 tons a year behind the German Empire. The total make of pig-iron by all three countries is likely in 1907 to be about 50,000,000 tons, their total make for the first half of the year having been practically 25,000,000 tons.

In no other country has there been a material advance of pig-iron output in 1907. The increased contribution made to the world's make of pig-iron by other countries in 1907 is not likely, therefore, to be of much account. Even Canada, which was expected this year to go ahead as she has never done before in all branches of industry, has made less pig-iron in 1907 than in 1906. But this does not mean that the general condition of the trade is not healthy. Its one unsatisfactory feature is the high cost of raw materials. This condition has resulted in a reduced import of iron ores from foreign countries, and more especially from Spain, while the high cost of coal and coke is being keenly felt by all makers who have to purchase those materials.

"ELECTRIFYING" THE COUNTRY. [St. Louis Republic.]

In the expectation that leading Pennsylvania railroads will soon be "electrified" the Philadelphia Press concludes that the "age of steam" is close to its end as far as locomotives are concerned. It consents to qualify this conclusion only when it finds experts estimating that it will cost not less than \$2,500,000,000 to inaugurate the expected revolution.

No one can say where so much money is likely to come from, nor will most people expect to live to see the last of the locomotive, but when it comes the matter of "electrifying" the railroads will present no greater difficulties than that of "electrifying" the country, which is now going on from day to day so quietly as to attract little attention. Since the process has ceased to be a novelty it has continued in the Western and Southern States until the list of towns voting bonds to electrify themselves this month, last month or any month this year would be a monotonous repetition of what is now a commonplace event. As these elections are reported for September and the first week of October, the usual investment in electric-lighting and power plants in smaller towns is under \$50,000. In the case of private companies capitalizing lighting and power plants, local and interurban telephone systems, street railroads and interurban railroads, it is usually much heavier, though not heavy enough to compel attention because of the magnitude of any single enterprise. The feature of the process now most important is that, in detail, it is a local or neighborhood affair, while its totals, already big enough to be of the greatest importance, are still increasing in the same imperceptible way the work dropped into after the first novelty of its beginnings.

The amount of capital involved in the way the new State of Oklahoma is carrying on this part of its program of progress will compare, when the totals are finally footed, with the cost of the greatest works of the nineteenth century as the "age of steam." The same processes at work in the country around St. Louis in every direction, with the extension of the interurban electric railroads only fairly beginning, suggest the methods by which the work of electrifying the whole country will go on as far as it is practical to carry it. It will be a revolution when completed which may cost more than experts

can estimate, but it will be no more sensational or disturbing than the processes by which the West and South are now quietly electrifying themselves up to the limits of "modern improvements."

THE TELEGRAPHERS' "STRIKE." [New York Commercial.]

As a closing feature of one of the most ill-advised and absurd strikes in the long history of labor unions the telegram of President Small of the Commercial Telegraphers' Union to all the local unions in the country was not a surprise; it was simply an additional absurdity. It simply advises the unions to vote individually on the president's proposition to "call off" a strike that practically has no existence, for it had been a failure from the very moment of its declaration, and long ago lost even the semblance of form or substance or organization. Except that here and there a striker might be reinstated in his former position, a unanimous vote formally declaring the strike ended would hardly make any appreciable change in the present situation; that is, the great bulk of the outgoing men would still be without work and with little or no prospect of getting it; the general treasury is now depleted and the strikers are not receiving the "benefits" assured them—which situation would continue, and the two companies would be firmer than ever in their determination not to grant the smallest fraction of any one of the "concessions" demanded by the operators. "If we were right on the first day of the strike," argued the chairman of the moneyless finance committee yesterday, "we are right now. It is better to starve than to surrender." There is logic in the first declaration, but everybody except the most mulish dullard in the ranks of these strikers knows and acknowledges that they were all wrong at the outset. And if any among them honestly believe that dying for the alleged "principles" at stake in this affair is preferable to surrender and living, there can be little doubt of their getting the opportunity to "starve."

THE MIDDLEMAN. [Houston Post.]

The demand of the European spinners for the elimination of the middleman who thrives between the cotton producer and the spinner is not without a certain plausibility, but it is easy to see that it will be no easy matter to so revolutionize the cotton industry as to entirely dispense with the middleman, who may be a ginmer, a country merchant, a bank or a factor. A system is a system, and the present system of handling cotton has been in existence for many years. Tens of thousands of farmers have only an equity in the crop they produce, since they are but tenants who for the most part owe the store for supplies. If every producer were a "planter" and solvent, or able, in other words, to finance his yearly output, he might be quite independent of middlemen. But the handling of cotton is based upon average conditions, and it is not likely that the general system will be greatly changed for many years to come.

There is no doubt that the middleman absorbs quite a percentage of the proceeds of the crop, but it is not clear yet that it is even desirable to eliminate his services. He fills a place in the industry, and will not vacate at the mere bidding of either spinner or producer.

If it be desirable, however, to enforce economy to the point of excluding the middleman between the producer and the spinner, is it not just as pertinent to raise the question of excluding the middleman between the spinner and the consumer? If we are not greatly mistaken, the middleman between the spinner and the consumer absorbs thousands where the raw-

material middleman absorbs merely dollars. Surely if the finished-product middleman were eliminated the price of textiles might be materially reduced. The matter might be taken ever further. Why not the producer raise, gin, manufacture and sell his product direct to the consumer and eliminate even the spinner? Wouldn't that be a saving also? The last analysis would find each consumer producing and manufacturing his own staple and every home a factory. Thus cultivation would revert to original principles and the middleman of every degree would be driven into productive industry or forced to starve.

The fact is, the middleman in any well-organized system plays a necessary and even indispensable part. He performs a work that the average individual cannot perform for himself economically. Under any broad construction, all toilers of whatever profession or vocation, other than producers, belong to the middleman class. All of us work for the man who tills the soil. Directly or indirectly, this is absolutely true. It is perhaps true that there are an insufficient number of men engaged in the work of production and entirely too many taking toll of the farmers' product. The remedy for a condition like that is a readjustment of human activities, and such a readjustment will in good time be effected through the operation of natural law without extraordinary effort on the part of any class of men who at best are merely tollers of the fruits of the real producers, and at the same time servants of these real lords of the world.

FOR RIVERS AND HARBORS. [Mobile Register.]

The National Rivers and Harbors Congress will convene in the city of Washington on Wednesday, December 4, and will continue its sessions on the succeeding Thursday and Friday. The congress will be the second to convene after its reorganization more than a year ago. Its first session was most encouraging in the fact that its fundamental principle of a fixed and settled policy of annual appropriations for the improvement of the rivers and harbors of the United States, without regard to section, but wholly with regard to merit, commended itself to the commercial and manufacturing interests of the country and to men distinguished in public life, but there is every reason to believe that its coming session will be far more encouraging.

The attention of the country has been directed to the absolute necessity for the improvement of inland waterways and harbors in a manner so forceable and so direct that the interest cannot be abated. It was an interest dormant for years, save in particular sections of the United States, and whether it has been aroused to the plane of a demand that will not be satisfied with less than full compliance by the energy of local improvement associations, or by the admitted inability of the railways to carry the freight offerings of the country is not the material question. The real question is in the universal concession in all sections that the trade and commerce of the United States cannot be adequately served without the improvement of the rivers and harbors on a systematic plan of continued work with adequate appropriations made annually.

That is the policy, and embraces the aims of the congress. In its sessions and its deliberations no section of the country should be without representation. All are alike interested in its work, and to no more important subject could the commercial, manufacturing and agricultural interests of the country be directed than to the coming session of the National Rivers and Harbors Congress and to adequate representation in its deliberations.

LUMBER

Alabama and West Florida Lumbermen.

The regular monthly meeting of the Alabama-West Florida Lumber Manufacturers' Association was held last week at the Commercial Club rooms in Birmingham, with President James C. Williams presiding. The condition of the lumber market was discussed at length and consideration given to reports relating to freight rates, weights, etc. At the banquet of the Order of Hoo-Hoo, following the meeting of the association, Mr. John L. Kaul responded to the toast "The Success of the Lumber Manufacturers in Alabama," and intimated that the lumbermen would suffer unless curtailment in the production of certain grades of lumber is made. Addresses were also made by Rufus N. Rhodes, editor of the Birmingham News; J. C. Williams, T. H. Johnston and others.

Has Begun Operation.

The Pearl Lumber & Oil Development Co. has incorporated with a capital stock of \$200,000 and has begun the operation of a sawmill at Pearl, La., of 30,000 feet daily capacity. The company will make a specialty of railroad timber, car sills, bridge timber and rough lumber. Its officers are Messrs. William P. Smith, St. Louis, Mo., president and manager; J. Hesterberg, Reading, Ohio (postoffice Cincinnati), vice-president; C. E. McKeag, Chicago, Ill., secretary, and A. M. Stearns, Lockland, Ohio, treasurer.

New Mill for Yazoo City.

It is announced that the Maley Hardwood Lumber Co. of Edinburg, Ind., has practically completed negotiations for the purchase of a site of eight acres at Yazoo City, Miss., and will erect a band-saw mill to have a daily capacity of 60,000 feet of lumber. The company will develop a large tract of virgin hardwood timber which it owns near Carter, 11 miles north of Yazoo City, on the Belzoni branch of the Illinois Central Railroad. Operations will be in charge of J. S. Grant, secretary of the company.

Lumber Notes.

Building permits issued in Macon, Ga., during August and September represent an estimated valuation of \$137,000.

It is announced that all the redwood ties on the Harriman lines throughout the Southwest will be replaced with pine ties.

The Gulf Coast Lumber Exporters' Association has appointed J. G. Joyner inspector-in-chief, with offices in Mobile, Ala.

James Sheldon, Jr., of the Bureau of Corporations, Department of Commerce and Labor, Washington, D. C., will investigate the timber resources of Arkansas, Indian Territory, Texas and Louisiana.

Messrs. P. J. Dennison and Thomas A. Enochs, tie contractors, of Lexington, Tenn., are reported to have secured 25,000 cross-ties during September for the Nashville, Chattanooga & St. Louis Railway.

Messrs. Henry Sperry, George A. Washington, E. A. Lindsey, J. H. Baird, T. E. Allen and associates have incorporated the Cumberland Land & Timber Co. of Nashville, Tenn., with a capital stock of \$100,000.

On October 18 the Virginia & Southwestern Railway will put into effect an order placing the minimum weight of lumber shipments in carload lots at 34,000 pounds. It is understood that the Norfolk & Western and other railroads in Virginia will put a similar order into effect about November 1.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

The Seminole Manufacturing Co.

The present status of the plans of the Seminole Manufacturing Co. of Clearwater, S. C., indicates that the company's large cotton mill will be in operation early in November. Several months ago the MANUFACTURERS' RECORD reported particulars of this company, which has a capital stock of \$600,000, and will operate 20,000 spindles and 512 looms on the production of fine drills and wide sheeting, using print-cloth numbers. Construction work is practically completed, and the steam and water plant is almost ready to operate. Most of the textile machinery is in position, including shafting. The Kitson Machine Shop of Lowell, Mass., is furnishing the picker machinery; Lowell Machine Shop of Lowell, Mass., the roving, spoolers, warpers and slasher; Mason Machine Works of Taunton, Mass., the cards, spinning, drawing and looms. Thos. Barrett, Jr., of Augusta, Ga., is president of the Seminole Manufacturing Co.; M. H. Hendee, Clearwater, is manager; A. H. McCarrel, superintendent, is in charge of the construction and engineering at Clearwater, and Wm. McKinley, Jr., of 105 Worth street, New York, is agent.

Turner Mills Company.

The Turner Mills Company of East Monbo, N. C., has decided to operate its cotton-yarn mill by water-power direct, using steam for heating and electricity for lighting. This company's recently announced contract to Messrs. S. S. Ordway & Sons of Winston-Salem, N. C., includes construction of dam, wheel pit and concrete foundation for mill building. As the MANUFACTURERS' RECORD heretofore stated, the company will build a mill with capacity of 10,000 spindles, but will begin manufacturing with 6000 spindles in position. C. H. Lester is superintendent of construction and engineer in charge at East Monbo, with postoffice address at Monbo, N. C. General correspondence to the company should be mailed to W. D. Turner, president, Box 175, Statesville, N. C.

Denton Cotton Mills Co.

The Denton Cotton Mills Co. of Denton, N. C., has been incorporated with a capital stock of \$100,000 and will build a mill of 5000 spindles for the manufacture of cotton yarns. Its incorporators are Messrs. Berry Davidson of Gibsonville, N. C.; J. W. Noel of Lexington, N. C., and J. A. Noel of Roxboro, N. C. Site has been secured, and arrangements will be made soon for construction of the necessary buildings.

A 5000-Spindle Mill.

It is announced that a company will be organized with capital stock of \$100,000 to build a cotton-yarn mill of 5000 spindles at Randleman, N. C. J. H. Millis will be president and W. N. Elder secretary-treasurer.

The Echota Cotton Mills.

The Echota Cotton Mills of Calhoun, Ga., has been organized with a capital stock of \$100,000 and the following officers: President, T. W. Harbin; vice-president, R. Pitts, and treasurer, O. N.

Starr. This company was mentioned recently by the MANUFACTURERS' RECORD as in process of formation. It has secured site for plant and is now considering details of construction and equipment.

The Ella Manufacturing Co.

The Ella Manufacturing Co. of Shelby, N. C., has awarded contract to Messrs. Alee & Edwards of Hickory, N. C., for construction of its mill building, to be one story high, 77x356 feet, with concrete floor. Particulars of this company and its plans for mill were reported last week, including mention of equipment as 5000 spindles and 126 looms. Machinery contracts have been awarded.

Textile Notes.

W. N. Elder and associates of Trinity, N. C., will establish a knitting mill.

Mr. Fred Williams and associates will organize company to build a mill for knitting hosiery at Fearington, postoffice at Durham, N. C.

Messrs. D. M. Patrick, H. A. Grady and L. A. Bethune of Clinton, N. C., are interested in plans for forming company to build cotton mill.

The Ellawhite Cotton Mills of Uniontown, Ala., is reported as contemplating the erection of an addition mill. This company's present plant is operating 10,000 spindles.

The Wah Ree Hosiery Mills of Tarboro, N. C., is reported as to install additional machinery for increasing present daily capacity from 500 to 1000 dozen pairs of hosiery daily.

It is reported that the Victory Manufacturing Co. of Fayetteville, N. C., will build another print-cloth mill during 1908. Its present plant is operating 12,000 spindles and 400 looms.

The Junction City Land Co., W. R. Frier, president, of Junction City, P. O. at Broxton, Ga., is interested in a plan for the organization of a company with capital stock of \$200,000 to build a cotton factory.

With a view to increasing its working force, which now numbers about 500, the Lynchburg Cotton Mill Co. of Lynchburg, Va., has issued a booklet giving colored views of the plant and its surroundings and information about the provisions made for the comfort, convenience and pleasure of its employees.

Large Plant Completed.

Messrs. Swift & Co. of Chicago have completed their large cottonseed-oil refining plant at Charlotte, N. C., at a reported expenditure of nearly \$400,000. The plant is located in North Charlotte, on the Southern Railway, and consists of two brick and steel structures, one of which is used as the power-house and equipped with two 160-pound boilers, while the other is equipped with the necessary refining machinery. There are nine large stationary tanks for oil and a water tank of 40,000 gallons capacity. Other facilities include an office building, 100 8000-gallon tank cars, scales and other equipment. The plant was constructed under the supervision of B. H. Stephens, and will be operated by B. B. Shuler, manager, and F. J. Garvey, superintendent.

The American Boiler Manufacturers' Association at its Atlanta meeting last week elected Messrs. M. F. Cole, Newnan, Ga., president; T. M. Reese, Pittsburg, Pa.; J. Dan Smith, Charleston, S. C.; W. A. Brunner, Phillipsburg, N. J.; H. D. McKinnon, Bay City, Mich.; William A. Ryan, Duluth, Minn., vice-presidents; J. F. Wagner, St. Louis, treasurer, and J. D. Forosey, Cleveland, secretary.

MINING

New Maryland Marble Quarry.

Active operations have been started on the opening up of a vein of white marble in Baltimore county, Maryland, by the Baltimore County Marble & Trading Co. The numerous preliminary borings made show a deposit of marble almost pure white in color, of fine texture and especially suited to high-grade building construction. At present the company is removing the top surface, which is composed of what is known as one and two man stone, and is used principally for rubble masonry work. A crushing plant of 120 tons daily capacity has also been installed and is crushing a portion of the top surface into assorted dimensions from a fine white sand to two inches in size, this material being suitable for the manufacture of a fine grade of concrete blocks and in reinforced-concrete work. As soon as the top surface is removed active quarrying of the marble and sawing it into suitable blocks for building purposes will be started. The quarry is located about 12 miles from Baltimore, and is directly on the Maryland & Pennsylvania Railroad. Officers of the company are Wallace P. Harvey, president; Francis K. Gilmor, treasurer; Norvell E. Miller, secretary, and William King, managing engineer. Its principal offices are at Loch Raven, Md., and branch offices in the Central Savings Bank Building, Baltimore, Md.

Installing New Equipment.

The Austen Coal & Coke Co. of Austen, W. Va., advises the MANUFACTURERS' RECORD that it is installing new equipment and increasing its facilities at its coal-mining and coke-manufacturing plants at Austen. Among the improvements being made are the installation of a Covington coke-pulling machine at one block of ovens and the erection of a breaker and installation of a coal-crushing plant, with elevators, etc., at its No. 1 mine. It is also doubling the capacity of its power-house and installing another Harrisburg engine and a 500-volt Crocker-Wheeler generator. All labor and material have been contracted for, and Heyl & Patterson of Pittsburg, Pa., are the constructing engineers. Officers of the Austen Coal & Coke Co. are Messrs. C. H. Zehnder, West Street Building, New York, president; William J. Wilson, 40 Wall street, New York, treasurer, and F. W. Horschler, Austen, W. Va., superintendent. Mr. Horschler has charge of purchasing all supplies.

The Metallic Alloys Co.

The Metallic Alloys Co., which organized recently, has purchased and will continue the development of the properties heretofore being developed by Messrs. Kendall & Flick of Elkton and Lyndhurst, Va. Additional power and equipment has been installed at Elkton, and the output of finished product has been increased from 10 to 25 tons daily. The production is manganese oxide, for use in the manufacture of brick, tile, glass, pottery, brass, etc. The company's offices are at 99 John street, New York; J. A. Rogers, treasurer, in charge.

To Develop West Virginia Lands.

A charter has been secured by the Preston Coal Co., whose principal office will be at Scottsdale, Pa., for the purpose of developing coal properties in Grant district, Preston county, West Virginia. The company has an authorized capital stock of \$1,000,000, and intends to lay out a town to include an area not exceeding 640 acres. Its incorporators are Messrs. Frank P. Rush of Uniontown, Pa.; Erastus L. Stoner, Marcellus L. Hasness and Judson

T. Strickler of Scottsdale, and Benjamin A. Wirtner of Glendale, Pa.

Loading in New River Field.

Coal and coke loading in the New River field for September amounted to 484,680 tons of coal and 682 cars of coke. Coke shipments were made from the following points: Quinimont, 48; Raleigh, 11; Beechwood, 4; Macdonald, 62; Turkey Knob, 54; Collins, 87; Harvey, 66; Fire Creek, 28; Nuttall, 10; Fayette, 6; Ansted, 112; Rush Run, 19; Brooklyn, 32; Chapman, 33; Kaymoor, 110.

Mining Notes.

For the seven months ended July, 1907, a total of 994,618 tons of coal was shipped over the lines of the Toledo & Ohio Central Railway.

Messrs. Spencer S. Marsh and McAllen B. Marsh and Mrs. Adelaide L. Adair have incorporated the Marsh Mining Co. at Atlanta, Ga., to develop mines in the northern part of the State.

FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

For Making Eye-Glass Frames.

Sajiro Tateish, 48 Minamiachi, Takunawa, Shibuku, Japan:

"There is a party inquiring about machine for making eye-glass frames, and we shall be obliged if you will kindly notify the manufacturers to mail us catalogue with prices."

Greenville.

The Evening Piedmont of Greenville, S. C., in a recent industrial issue enumerates a number of interesting facts relating to the material progress of that city. Among other things reference is made to the city's railroad facilities, established and projected, and figures produced showing that the outgoing and incoming freight for the year ended December 1, 1906, amounted to 17,149 solid cars, an increase over the previous year of more than 20 per cent. The city has 10 cotton mills, representing an investment of about \$6,000,000, in addition to a mill for manufacturing woolen goods and blankets, and a bleachery and finishing plant. Its banks show a combined capital, surplus and undivided profits approximating \$1,000,000 and individual deposits of about \$2,500,000. Municipal figures for 1906 show that it issued building permits during the year to the value of \$307,363; had completed 27,360 feet of sewerage, 11.5 miles of cement sidewalks, 26,500 square yards of macadam, and placed 30,000 feet of standard curbing. Its church and school facilities are excellent, and it supports a municipal league and board of trade. It also has a cigar factory, flour mills, foundries, woodworking plants, wagon factories, steam laundries, marble works, wholesale and supply houses, etc.

Fertilizer Manufacturers.

The fourteenth annual convention of the National Fertilizer Manufacturers' Association was held last week at the Lynnhaven Hotel, Norfolk, Va. Consideration was given to a number of subjects interesting to the members of the association, and the following officers elected for the ensuing year: C. A. Alling, Chicago, Ill., president; J. T. Welch, Louisville, Ky., vice-president; C. H. Dempwolf, York, Pa., treasurer, and W. G. Sadler, Nashville, Tenn., re-elected secretary. Atlantic City, N. J., was chosen as the next place of meeting.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

OVER LAND AND SEA.

Unique Railway Extension Building by Henry M. Flagler and Its Great Concrete Viaducts.

In its building of a line along the Florida Keys to Key West the Florida East

part of the line north of Knight's Key, in order to get that portion into operation by the middle of January and have it earning something instead of lying idle.

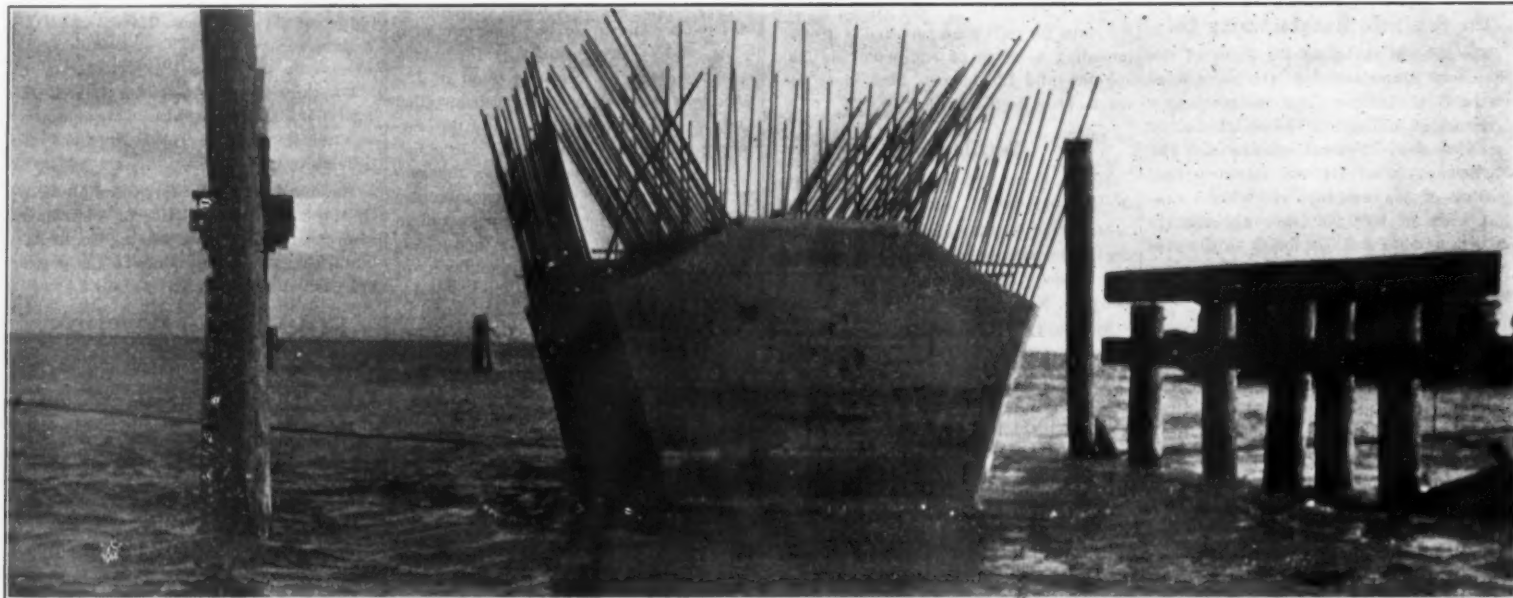
"Work is well advanced on the entire road, and the engineers have met with no insuperable engineering problems in connection with the viaducts, and we have 2500 men at work, whereas at this time a year ago only 1600 were employed. The cost of the work is entirely within the

structed when the line is finished, the actual measurement being 30,550 feet.

These viaducts will be fully exposed to the action of the ocean, but it is estimated that their solidity will fully resist the waves, and that their height is sufficient to place the trains which will run upon them fully beyond danger of any storm. One of the pictures shows a finished pier before the viaduct arches are placed upon it. It will be seen that it is constructed

conceive the attractions of such a trip, and that travel over the line will become popular goes almost without saying.

That the reader may fully comprehend how much this unique rail trip will resemble a water journey, it may be stated that, in addition to the concrete viaducts, there will be a total of 60 miles of rock embankment through shallow waters separating the different keys, while the rest of the mileage will be over the islands them-



A REINFORCED CONCRETE PIER.

Coast Railway, of which Henry M. Flagler is president, is doing a piece of work that is without an equal in the world. More than half of this extension is to be completed within three months, and the MANUFACTURERS' RECORD is officially informed that the company has concentrated its construction forces upon that portion of the extension to the northward of Knight's Key, in order that this much may be finished by the time named and

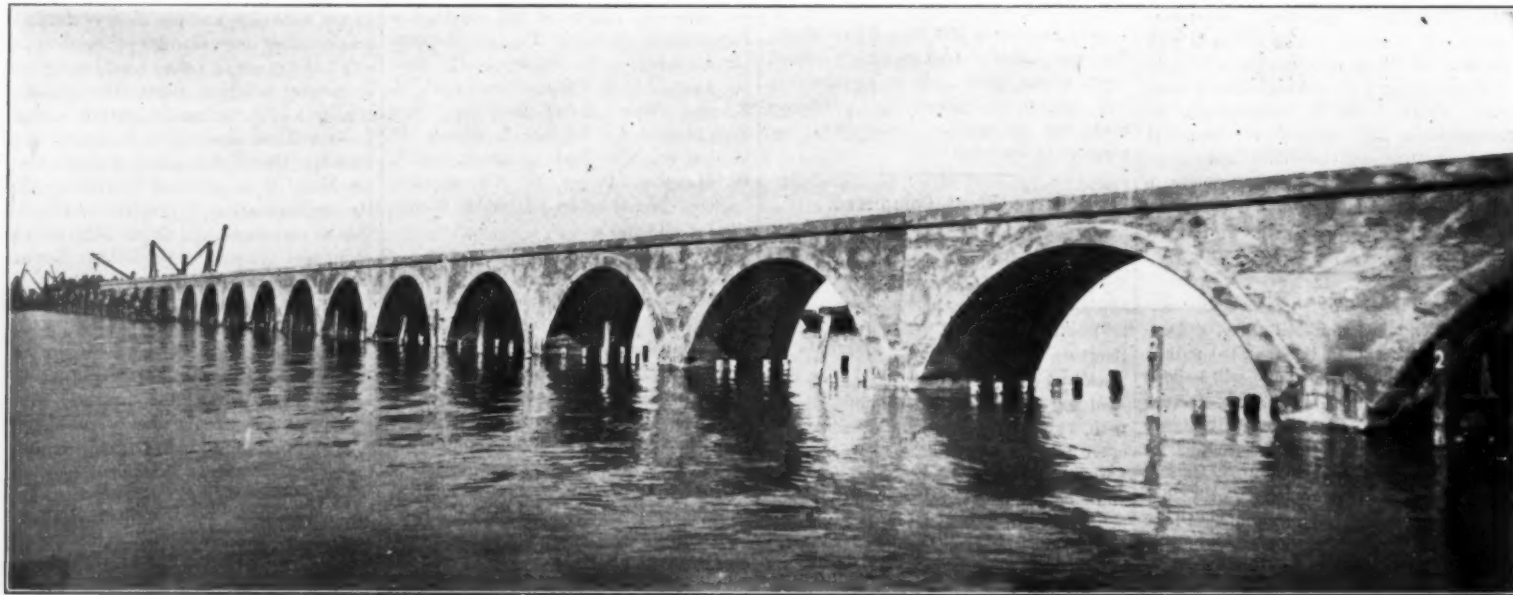
original estimate, and Mr. Flagler is fully able financially to complete the extension as proposed."

Mr. Parrott further states that Mr. J. C. Meredith is still chief engineer of the line, and that a report that Mr. Oberlin M. Carter had been engaged was an error.

The most remarkable part of this railway extension is the building of several large viaducts of concrete, of which construction work pictures are herewith

of reinforced concrete, as the steel reinforcing bars are projecting from its upper surfaces in the direction which will be taken by the arches when they are erected. Another picture shows how the arches are built, with the false work and wooden forms all in position preparatory to laying in the concrete material. A third picture shows a long section of finished viaduct, with construction still in progress at the farther end, while a fourth gives a

selews. These keys, or islets, as the student of physical geography knows, are founded upon coral rock, and on one of them at least rock cutting had to be done to provide a roadway for the line. Altogether about 50 keys must be crossed by the road, some of them having an area of several square miles, although most of them are small and only of a few rods in extent. There will be three drawbridges at various points on the line, and in addi-



LONG STRETCH OF COMPLETE CONCRETE VIADUCT.

then put in operation. This concentration of the forces caused a report that the Key West extension had been abandoned on account of financial difficulties, but this is also officially denied from the headquarters of the company in New York, and Mr. J. R. Parrott, vice-president and general manager, says:

"We had been working on the extension at both ends and in the middle, but recently decided to concentrate upon that

shown. There are four of these viaducts, each 31 feet high above water-level, the longest being nearly two miles long from Long Key to Conch Key. The next in length is over Moser channel, about a mile and a half long; a third of nearly equal length is over Knight's Key channel, and a fourth is a little less than a mile in length, over the channel at Bahia Honda Key. Altogether nearly six miles of this concrete viaduct will have been con-

side view of a finished section of viaduct which well displays its magnitude and solidity, each arch being of 50 feet span and 25 feet high. When entirely finished to Key West this road will give a journey of about 100 miles from the mainland along the little islands of the Florida coast and over these massive viaducts to Key West, at the extreme southern point of the United States on the Atlantic coast. Little imagination is needed to

tion to them there will be seven openings through the embankments to permit the passage of small boats.

Numerous photographs have been taken along the route, and they show many pretty views of land and sea, including also glimpses of palm trees either singly or in groves. There will be much to interest the traveler along the entire route, and while it will surely become attractive to winter tourists, the more practical pur-

pose of the line is to afford a short freight route to Cuba and the Panama Canal. Havana is only about 90 miles south of Key West, and fast steamers would cover the distance in a very few hours. The railroad company, for handling the freight that will certainly develop for Gulf and Isthmian traffic, will build extensive terminals at Key West, providing all facilities for handling any amount of business which may be developed.

the credit of profit and loss, \$6,242,102; miles of line operated 7547, increase 173 miles.

President Finley says that the purpose of the policy of establishing the territorial relations of the company may now be considered as attained, and the future policy would seem to be a concentration of effort to build up and strengthen established lines on which the possibilities of earnings are no longer doubtful. This involves

Lynchburg has become a necessity, and the double track for about 30 miles south of that point is essential for the successful and economical handling of traffic. At such points traffic concentrated and there was no way to move it promptly but by building second track. The improvements included not only laying second track and improving grades and curves, but the building at various points of more substantial bridges and viaducts.

strengthened by the establishment of 800 new industrial enterprises placed in operation during the year, while numerous existing factories are generally being enlarged. These figures include 48 new textile manufacturing plants completed and placed in operation and the development of electrical power plants and the opening of new coal mines indicate what will be the future growth of industries. There were also 27 new furniture factories es-



SIDE VIEW OF FINISHED VIADUCT.

SOUTHERN RAILWAY.

President Finley's Report Shows Great Growth in the Territory It Serves.

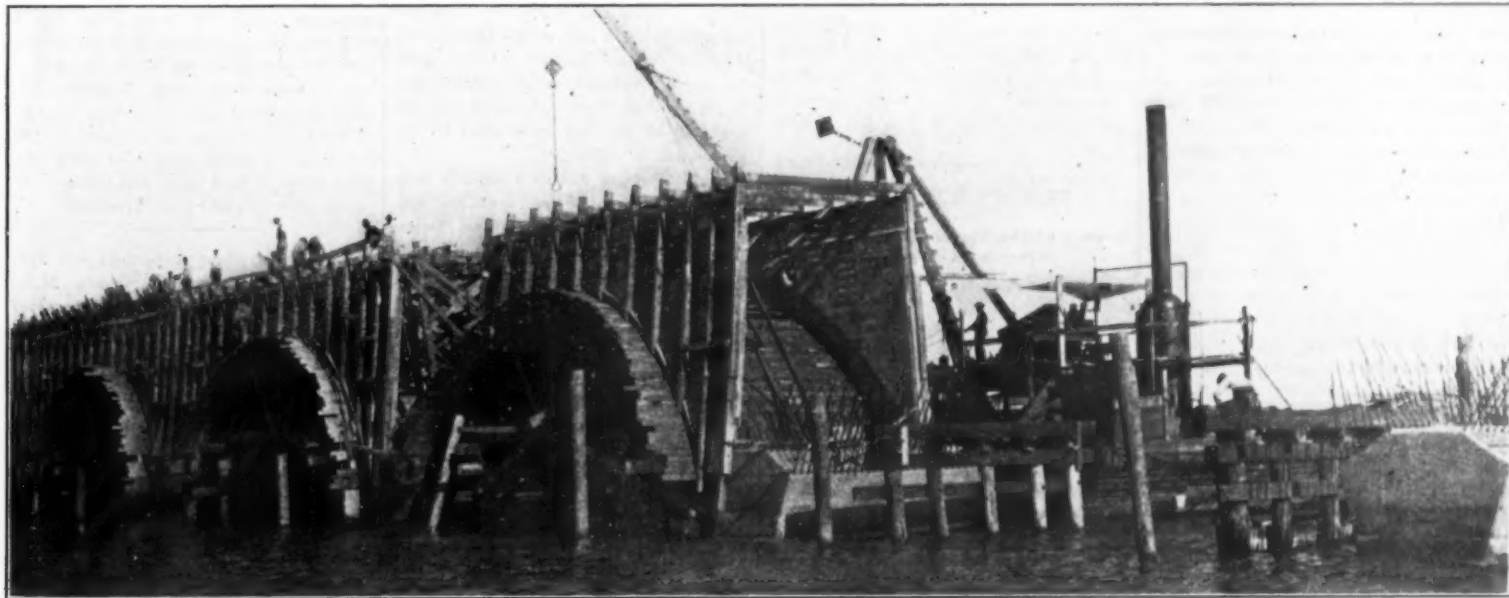
The Southern Railway Co. has issued its thirteenth annual report, which covers the fiscal year ended June 30, 1907. It shows gross earnings from operation \$56,657,994, increase as compared with the previous year \$3,016,555; operating expenses and taxes \$44,699,282, increase \$4,

building of second track and revising grades and curves on lines carrying the heaviest traffic. Much has been done, but much more is to be done. When construction now under contract is completed the Southern Railway will have a total of over 292 miles of double track, of which 207 miles were in service at the close of the fiscal year. This double-tracking includes the following: Alexandria to Orange, Va., 78 miles; Monroe to Sycamore, Va., 37 miles; Greensboro to Salis-

Construction has also progressed on the new line which the company is building between Bushnell, N. C., and Maryville, Tenn. On the North Carolina end 15 miles are graded out of a total of 26 miles, and on the Tennessee end over 37 miles have been graded out of a total of 39 miles, leaving only a short distance to be graded to connect the two sections. This line will be altogether about 65 miles long, with a maximum grade of one-half of 1 per cent. President Finley notes that an

tablished, and in various lines similar increases are shown, especially of other woodworking plants.

Referring to recent legislation and the company's relations with the public, President Finley says that the management is endeavoring to cultivate a spirit of co-operation with the communities which the railway serves, and that a settlement of the questions at issue is being sought with the least possible delay.



VIADUCT IN COURSE OF CONSTRUCTION.

926,143; net earnings \$11,958,712, decrease \$1,909,587; total income \$13,787,993, decrease \$1,609,306. After deducting interest and rentals, etc., there was left a balance over fixed charges of \$2,290,321, decrease \$2,938,744. After the payment of dividends on the preferred stock there was left a balance of \$790,321, decrease \$1,438,744. The balance carried to the credit of profit and loss was \$253,986, a decrease of \$975,252. Total balance to

bury, N. C., 52 miles; Morristown to Knoxville, Tenn., 41 miles; Atlanta to Austell, Ga., including the Atlanta belt line, 23 miles; Chattanooga, Tenn., to Ooltewah Junction, Tenn., 15 miles, besides smaller sections of double track at various points, including 10 miles between Danville, Va., and Pelham, N. C. In building this double track the company has placed it where the traffic is densest. It is also noted that the new line around

extension could be made from Bushnell to Franklin, N. C., to connect with the Tallulah Falls Railway, which has a similar grade, which would enable economical handling of traffic between Knoxville and Georgia and South Carolina points. He also notes the pursuance of work on other lines, as heretofore reported.

With reference to the industrial development the president of the company says that the territory covered by it has been

ROCK ISLAND'S ANNUAL.

A Story of Progress—President Winchell on Recent Legislation.

The Chicago, Rock Island & Pacific Railway Co. has issued its 27th annual report, which covers the fiscal year ended June 30, 1907. The gross earnings were \$60,238,419, increase as compared with previous year, \$9,000,561; operating expenses \$41,044,142, increase \$5,977,095;

net earnings \$19,194,277, increase \$3,023,478; total income \$19,939,459, increase \$2,752,822. Total charges, which cover taxes, interest, rentals and improvements on leased line, were \$11,188,942, increase \$788,137. This being deducted from the total income left as available for dividends \$8,750,517, increase \$1,964,685. After the payment of dividends there was left \$4,633,780, which was carried to credit of profit and loss, this latter amount being an increase of \$2,525,509. The balance to the credit of profit and loss on June 30, 1907, was \$19,123,124, including the surplus for the year just ended.

President Winchell notes that the St. Louis, Kansas City & Colorado Railroad was taken over for operation during the year; also that the line from Fordyce to Crossett, Ark., 57 miles, was put in operation on February 1 last, while the line from Tinsman to Eldorado, Ark., 36 miles, was put in operation on June 23 last. These last two lines are part of the Rock Island, Arkansas & Louisiana Railroad, and trackage rights have been obtained over the Louisiana & Arkansas Railway and the Louisiana Railway & Navigation Co. to carry that line to Alexandria, La., while it is expected that the Rock Island line from Alexandria to Eunice, La., will be operated this month.

During the year there were located along the various lines of the Rock Island system 327 new enterprises at an estimated cost of about \$8,500,000. They will employ, it is said, over 8000 persons. There were built or additions were made to 58 tracks to private industries and four side-tracks to coal mines. The equipment was increased by 100 locomotives, 95 passenger train cars (including one passenger motor car), 6847 freight train cars and several cars for company's use. There was expended \$220,500 for new and additional signal and interlocking plants. The company also spent to meet the growing demands of increased traffic \$4,089,934 for additional and improved terminals at various points. The new freight depot and yards at St. Louis were put in operation last March.

President Winchell also says: "Legislation by the various States which your line serves, respecting rates and operating methods of railroads, has been excessive in quantity and severe in character. The Legislatures of five such States have passed laws establishing two cents per mile as the maximum rate of passenger fare, and other laws have been passed by the several States calling for serious reduction in freight rates. Doubtless a large part of this legislation has been due to misconception of the actual conditions. At every opportunity it is the policy of the officers of your company to endeavor to establish better relations with the people of the various States, and to impress upon them the fact that the progress of the section of the country traversed by your road, and the continued prosperity thereof, require candid co-operation between the railroads and the other business interests. The aim of all must be to promote the welfare of the country, and it is to be hoped that when the situation is thoroughly understood a spirit of mutual co-operation will be the result."

PINE BLUFF TO SHERIDAN.

Central Arkansas Electric Railway Co. Plans to Locate Settlers.

The MANUFACTURERS' RECORD is informed that the proposed line of the Central Arkansas Electric Railway Co. is to run from Pine Bluff, Ark., to a point near Sheridan, in Grant county, Arkansas. From there two branches will diverge, one running to Little Rock and one to Hot Springs. In all, the company will have a mileage of 90 miles, and the total

cost, including commissions and discounts on the bonds, is estimated at \$3,375,000. The population in the district served, exclusive of the cities of Little Rock, Pine Bluff and Hot Springs, which the line does not serve, was seven years ago 40,644. Assuming that the road will have the same earning power as have two similarly located lines now in operation, and taking in their cases also the 1900 census, the new line, it is estimated, should earn \$9.34 per inhabitant, and it should be able to operate for 54 per cent. of the gross earnings.

This would leave the company as net earnings \$174,458 per annum, and it is so near to what a 5 per cent. bond for the cost of the road would yield that the promoters have not thought it wise to attempt to finance it at this time. They have devoted their energies to two plans. They have sought a way of cheapening the motive power, first investigating the Ouachita river as a source for a hydro-electric plant. They had to abandon this, owing to extreme high water for a period of 10 days each year and low water for about 90 days. They then began the search for a workable seam of coal at a point near the junction. While they have not yet succeeded in uncovering a workable seam of coal with a rock roof, they have been much encouraged by recent developments. If successful, it is hoped to be able to produce electricity at the mine so cheaply that they can sell to the distributing companies at the three cities more cheaply than they can produce it. It is also proposed to develop a freight business to help out the earnings.

The company is furthermore seeking to arrange a plan which will locate truck farmers in its territory. It is described as land high above all floods, ideal for truck farming, vineyards and small fruits.

Until the promoters can secure a coal supply or additional settlers it is not probable any effort will be made to finance this road. They have surveys made, plans drawn and complete estimates of the cost. They know that financiers will demand a good proposition before they will advance the money for it, and they do not expect to build any part of the line this year.

The headquarters of the company are at Pine Bluff, Ark., and the officers are J. A. Holmes, president; D. H. Saunders, vice-president; E. T. Hooker, secretary and treasurer, and A. M. Van Auken, chief engineer.

FRISCO'S BUSY YEAR.

Report of the System Displays Large Growth of Earnings.

The St. Louis & San Francisco Railroad Co. reports for the fiscal year ended June 30, 1907, gross earnings \$38,621,067, increase as compared with the previous year \$6,574,410; operating expenses \$24,872,579, increase \$4,327,046; net earnings \$13,748,488, increase \$2,247,364; total income, \$15,289,354. After the payment of taxes, interest, rentals and other fixed charges there was left a net income of \$4,158,583. After the payment of dividends on the first preferred stock there was left a balance or surplus of \$3,958,841, an increase of \$2,169,447, which was carried to the profit and loss account.

President Davidson also notes that liberal expenditures were made for additions and improvements to the property and its equipment. In addition to the equipment orders which were filled during the fiscal year, contracts were also placed for 90 locomotives, 87 passenger cars and 5255 freight cars, delivery to be made during the last half of the current calendar year. Of the locomotives ordered, 70 are for freight service, 10 for passenger service and the rest for switching.

The new car and engine shops at

Springfield, Mo., are to be completed by February 1 next, and will cost approximately \$1,350,000. The new union passenger station at Birmingham, Ala., was put in operation on July 1 of this year, and the company has one-sixth interest therein. The new freight depot and yards at St. Louis, Mo., built by the Rock Island-Frisco Terminal Railway Co., were put in operation in March last.

The St. Louis & San Francisco Railroad Co. has also leased the Colorado Southern, New Orleans & Pacific Railroad, which owns the Orange & Northwestern Railroad and the Beaumont, Sour Lake & Western Railway, so that when the construction work on those lines now in progress is completed there will be a through line in operation from Houston, Texas, to Baton Rouge, La., while from the latter point to New Orleans the Frisco trains will be operated over the Yazoo & Mississippi Valley (Illinois Central) Railroad tracks.

The industrial department of the St. Louis & San Francisco Railroad notes the location of 338 new industrial plants, employing over 12,000 men, on the lines of the Frisco system during the year. This represents an approximate cost of \$9,000,000. This continued industrial development insures in a large degree a continued increase in freight and passenger traffic.

The company now has 863 locomotives, of which 63 were added during the year; 461 passenger cars, a net increase of four during the year; 26,702 freight train cars, a net increase of 2416 during the year, and 2412 company's service cars, a net increase of 844.

ON THE WASHINGTON LINE.

Rapid Progress Toward Completion of the High-Speed Electric Railway.

The continued fair weather during the past week has enabled the construction forces on the Washington, Baltimore & Annapolis Electric Railway to make rapid progress toward completing the line under the direction of the Roberts & Abbott Company of Cleveland, Ohio, who are the consulting and supervising engineers for the road, which was extensively described and illustrated in last week's issue of the MANUFACTURERS' RECORD. At the present rate of progress it seems probable that the expectations of an early completion and operation of the line entertained by the officers will be realized.

The Roberts & Abbott Company were also engineers for the electric railway connecting Fort Worth and Dallas, Texas, which was built several years ago by the interests which are now constructing the Washington, Baltimore & Annapolis line.

COLORADO & SOUTHERN.

President Trumbull's Incisive Words About Recent Railroad Legislation.

The annual report of the Colorado & Southern Railway covering the fiscal year ended June 30, 1907, has been issued. This company includes the Fort Worth & Denver City Railway and the Wichita Valley lines, both in Texas. The total operated mileage of the company is 1858 miles.

The gross earnings were \$13,456,489, increase as compared with the previous year \$1,803,043; operating expenses \$9,246,918, increase \$1,344,706; net earnings \$4,209,570, increase \$458,336. Net earnings after the payment of taxes \$3,874,374; total income \$3,985,456, increase \$389,043.

The company is also interested in the Trinity & Brazos Valley Railway in Texas, which is to connect the Colorado & Southern Railway with Galveston.

President Frank Trumbull says, concerning recent railroad legislation: "In

view of the valuable and far-reaching public services that must be performed by them" (the railroad companies), "may it not be true that much of such legislation has been amateurish in comparison with that of older countries, in that it has been hasty and restrictive only, and not also constructive, as it ought to be if the welfare of all the people is to be promoted by those who are entrusted with public office and by semi-public officials and employees? Has not much legislation by the States been enacted with no view whatever to aiding the railroads in solving the great problems which confront them, and will such legislation in the quiet hour seem excusable from any point of view, particularly that which may be found, after painful processes, to be actually 'invalid'?"

A GREAT SYSTEM.

The Rock Island Lines Operate in Eighteen States and Territories.

The fifth annual report of the Rock Island Company of June 30, 1907, shows that its total income was \$3,872,418; expenses and taxes, \$48,152; interest on the bonds of the Chicago, Rock Island & Pacific Railroad Co., \$3,668,976; balance for the current fiscal year, \$155,289; total balance, including surplus of June 30, 1906, \$451,847; surplus June 30, 1907, \$451,548. As the Rock Island Company owns all the capital stock excepting directors' shares of the Chicago, Rock Island & Pacific Railroad Co., the income of both companies is included in the foregoing statement. The total assets of the Rock Island Company are \$150,280,195. Its total capital stock (common) is \$96,000,000, of which \$89,602,402 is in the hands of the public, and the capital stock (preferred) is \$54,000,000, of which \$49,047,390 is in the hands of the public. The total assets of the Chicago, Rock Island & Pacific Railroad are \$233,657,984; its capital stock is \$145,000,000 and its funded debt amounts to \$87,431,880.

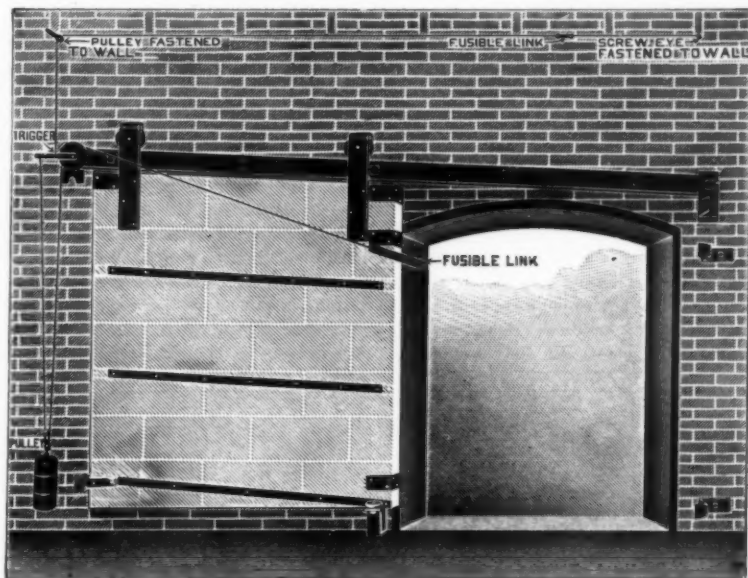
The Rock Island Company is at the head of the Rock Island system, which includes the Chicago, Rock Island & Pacific Railway, St. Louis & San Francisco Railroad, the Chicago & Eastern Illinois Railroad, and the Evansville & Terre Haute Railroad Co. Statements of these various lines are also presented briefly in connection with the Rock Island Company's report. This great system covers a total of 14,270 miles of line. In addition it has 500 miles of second and third track and 3652 miles of yard track and sidings. It covers 15 States and three Territories.

Standard Polyphase Apparatus and Systems. By Maurice A. Oudin, M.S., member American Institute Electrical Engineers. Fifth edition, revised and enlarged. Contains 207 photo-reproductions and diagrams and 21 tables. Published by D. Van Nostrand Company, 23 Murray and 27 Warren streets, New York city. Price \$3 net.

The fifth edition of this work, which is now brought up to the latest improvements, contains much valuable information on the characteristics and uses of the various types of polyphase apparatus and on the actual working of the several polyphase systems sanctioned by the best practice. Since the first edition was published there have been some noteworthy changes in this field, among which may be mentioned the increase in size of apparatus units, the development of appliances for their control and protection and the modification of the details of construction of some types of polyphase apparatus. These changes have all been fully covered, the original matter thoroughly revised and a chapter has been devoted to the growing importance of the single-phase induction motor.

MECHANICAL**Monarch Fire-Door Fixtures.**

An earnest movement of the past several years has been that for perfecting various devices for the prevention of fires in buildings and plants. One of the devices to which attention is now being called is the Richards "Monarch" fire-door fixtures, manufactured by the Richards Manufacturing Co. of Aurora, Ill. The Monarch equipment is illustrated here-



MONARCH FIRE-DOOR FIXTURES.

with. The picture shows manner of applying hardware (for standard three-ply tinclad fire doors) and the arrangement of cord and fusible links. One link is constantly in the opening and exposed to both sides of doorway; the other link is above the opening near ceiling. The fusing of either of these links releases the weights and allows the door to close. When doors are used on both sides of wall the cord passes through wall at point where end is attached to screw eye and continues the arrangement on other side of wall. With this double arrangement four fusible links are exposed. In case any one of the four links fuses, weights will be released and both doors will close.

In some cities local boards prefer to have cord cross opening with link in center of opening. These requirements are met upon application.

The fire-door hangers and various other Richards hardware specialties are detailed in the company's catalogue.

Two Tools for Concrete Work.

Two tools have recently been introduced which would seem to fill a long-felt want



NEW SLAB TAMPER.

in the building of concrete walls, beams, columns and other exposed members. It is very desirable that the exposed portions produce a smooth, even surface, and the unsightly pieces of stone showing on the surface should be avoided as far as possible. This is readily accomplished by the

use of the beam tamper illustrated herewith.

The tool consists of a number of comparatively thin blades, which are narrow at the upper end and taper down to a point at the other end, same being firmly secured in a metal yoke, which is driven into a wooden handle; this can be worked along the side of the form, and forces the stones back from the surface, allowing the mortar to flow between the blades and against the forms, thus giving a continuous mor-

tar surface. Contractors who have attempted to build retaining walls and other exposed concrete work cannot fail to appreciate the value of this tool.

Another useful tool is the slab tamper illustrated herewith. As is well known, in the average mixture of concrete there is considerable excess mortar which, if it could be used on the surface, would amount to considerable saving in surfacing the concrete floors and sidewalks. This tamper is designed to accomplish this result: The blades force the stones down, compacting them closely and allowing the mortar and fine material to come to the top. For ordinary cement-finished floors in reinforced-concrete buildings and for slabs resting directly on an earth fill it is sufficient to trowel these mortar surfaces without adding any additional mortar, which was considered necessary in the practice of the past. The resulting floor has been found to be excellent. It can be troweled as smooth as any sidewalk, and there is absolutely no chance for the finish to crack off of the concrete, as it is all mixed into one compact homogeneous mass. The concrete made with these



NEW BEAM TAMPER.

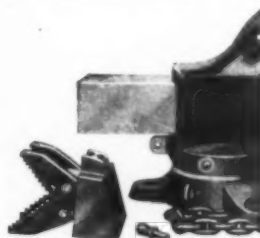
tampers is denser than it can possibly be with a solid tamper, as the air bubbles are sliced up and forced out. The thing that will appeal to the contractor most is the very great saving which can be accomplished with this tool. It was used in the floors for the Farmers' Union Warehouse at Anniston, Ala., the building being 300

feet by 120 feet. In this instance it is stated that the floor on the earth fill four inches thick, having as good a cement finish as can be desired, was laid at an actual cost to the contractor, including material, labor, finishing and superintendent, amounting to 50 cents per square yard. Both of the tools are the invention of H. R. Johnson, civil engineer, Atlanta, Ga., and the patent rights are controlled by him. The Fireproof Supply Co., 1124 Candler Building, Atlanta, Ga., is sales agent for the tools.

A High-Speed Pipe Attachment.

A novel idea of the Pittsburgh Automatic Vise & Tool Co. of Pittsburgh, Pa., is a combination machinists' pipe fitter vise. Heretofore such tools have had the pipe jaw located in the throat of the regular jaw. This not only interfered materially with the operation when working with the machinist jaw, as the pipe jaws protruded considerably into the throat of the vise, but it limited the capacity of the pipe held.

The inventors have therefore endeavored to eliminate such objections by utilizing the rear of the draw bar instead of the throat of the vise. To the end of this bar is fitted a glove-like casting. To this cast-

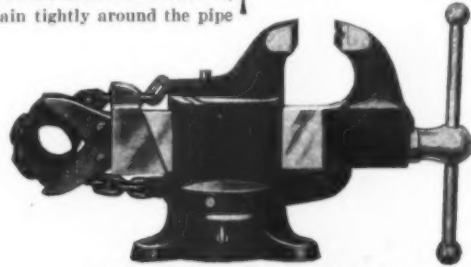


HIGH-SPEED PIPE ATTACHMENT.

ing are attached the pipe jaws, which are made of a special mixed tool steel, hammered, forged and oil-tempered. The jaws are placed closely together, for reasons obvious to all plumbers and steamfitters.

A small lug is screwed in the rear of the vise directly under the slide bar. This is slotted so as to permit the reception of one link of a chain.

The casting being placed in position on the rear of the vise, one end of the chain being made firm to the lug by means of a small pin, the pipe is placed in the jaws and the chain thrown around it, a link being dropped into the lug on the top of the casting. Then with both ends of the chain held firm a half-turn of the main screw of the vise throws the draw bar backward, drawing the chain tightly around the pipe



HIGH-SPEED PIPE ATTACHMENT.

and securely locking it against any possible rotation or movement.

As all the "Pittsburg" vises are automatic in movement, the swivel in the base of the vise is also locked (automatically) when the pipe is locked. Thus if the work is desired to be held on the outside of the bench the screw is loosened and the vise swiveled around, thus locking both the work and the vise.

The attachment can be left in place as long as wanted, thus not interfering with the other jaws of the tool. If, however, it is desired off, one pull of the pin and the chain is off as well as the entire attachment. It can then be placed to one side entirely out of the way.

Thus it can readily be seen that a pipe

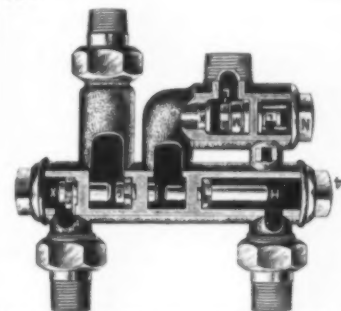
can be instantly held without any opening or closing of the jaws, irrespective of the position of the regular jaws.

As there is nothing to prevent the making of the pipe jaws any size desired, an unlimited jaw capacity is secured. Further than this, the pipe is capable of being placed to the most advantageous position for the operator.

One of the most important points, however, is that all possibility of crushing the pipe is done away with. This is made possible by the use of a chain of a limited tensile strength, which breaks long before the danger point of crushing the pipe is reached. As it requires but the slightest tightening upon the chain to firmly hold the pipe, it is possible to use such chain. Note the accompanying illustrations of the tool.

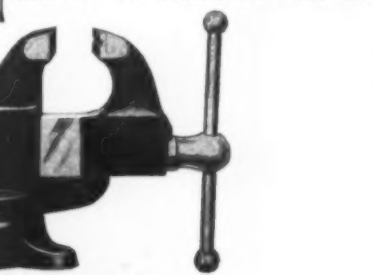
Auto-Positive Penberthy Injector.

While a large majority of boilers carry less than 150 pounds pressure, the usual high working pressure of the ordinary automatic injector, there is an increased demand for an injector operating between 150 and 200 pounds pressure. There is also a demand for an injector that will handle a water supply that has become heated by use of the syphon (or ejector) and in other ways, and is consequently too hot for injectors of the usual automatic type.



AUTO-POSITIVE PENBERTHY INJECTOR.

In feeding a boiler with water over 120 degrees Fahr. many users of steam experience a great deal of difficulty, due largely to their failure to meet the necessary conditions. Consideration must be given to the fact that at a certain point on high steam pressure the condensing qualities of the water are not sufficient. Steam must be condensed before it can pass through the injector. For instance, at 180 pounds steam pressure the same volume of feed water will not condense the steam that



would be sufficient to condense the steam at 120 pounds pressure. The higher the temperature of the feed water the less are its condensing qualities, and vice versa.

These conditions and requirements have resulted in the production of the auto-positive Penberthy injector herewith illustrated.

This injector differs materially, is constructed on new principles, having but five working parts and combining the features of a positive with those of an automatic injector. By this combination it is enabled to handle much hotter water and work on higher steam pressure than any other automatic injector. This injector is manufactured by the Penberthy Injector Co. of Detroit, Mich. The company will

give any information of a technical nature looking to the most productive and economical use of steam as applied with either injectors or ejectors.

bound together with wrought-iron rods.

"The Lackawanna grate bar has no projections; hence there are none to burn off. Being made up of separate segments,

production of wire and wire rope. The addition, a complete plant in itself, is located about 10 miles south of the main works at Trenton, N. J., and is termed,

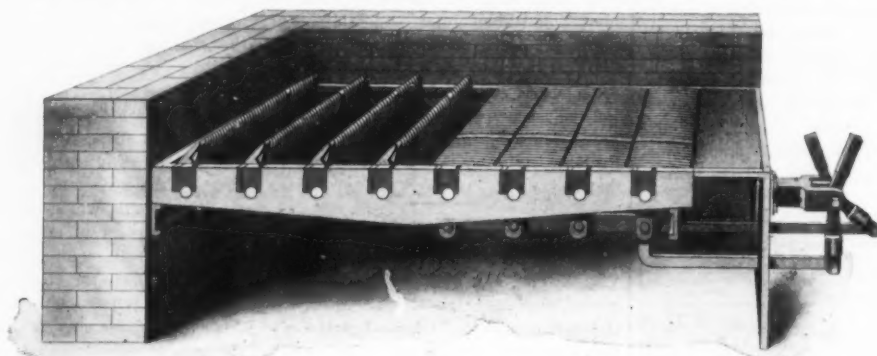
has built an entirely new town upon fields in the open country. This town, built of brick and stone, with wide streets and roomy houses, has its own water-works and electric-lighting station, buildings for religious worship and secular entertainment, a schoolhouse, hotels, a public park, recreation grounds and all the conveniences of a thoroughly modern city.

The Government has established a post-office in the town and named it Roebbling.

The additional works and equipment and the new town were designed by the engineering force of the John A. Roebbling's Sons Company and built under the supervision of C. G. Roebbling, president.

The Snell Mixer.

An illustration is presented herewith of the Snell mixer. In describing this mixer the manufacturer says: "In construction the mechanism is very simple. The entire mixer drum is open to view, and is quickly and easily cleaned. The drum is mounted on ball bearings, making it light-running, requiring less horse-power to the yard than any other mixer. From the standards up to the drum every piece that



THE LACKAWANNA GRATE.
(Has One-eighth-Inch Air Spaces.)

The Lackawanna Grate.

Interesting details regarding an improved grate are presented in a current pamphlet. They are, in part, as follows:

"Coal money is wasted in two ways—by buying a higher-priced coal than is necessary and by not getting all the good out of the coal bought.

"In both instances the grate causes the waste. A grate that will satisfactorily burn coal smaller than buckwheat is the Lackawanna grate.

"This grate will burn rice or barley anthracite to advantage.

"That means a saving to you of at least a dollar on every ton of coal you buy.

"This small coal is cheaper than the larger coals. Slate in coal, as mined, does not crush down to this size, and you therefore get pure coal—coal with more steam-making essentials than any other kind.

"This means another saving.

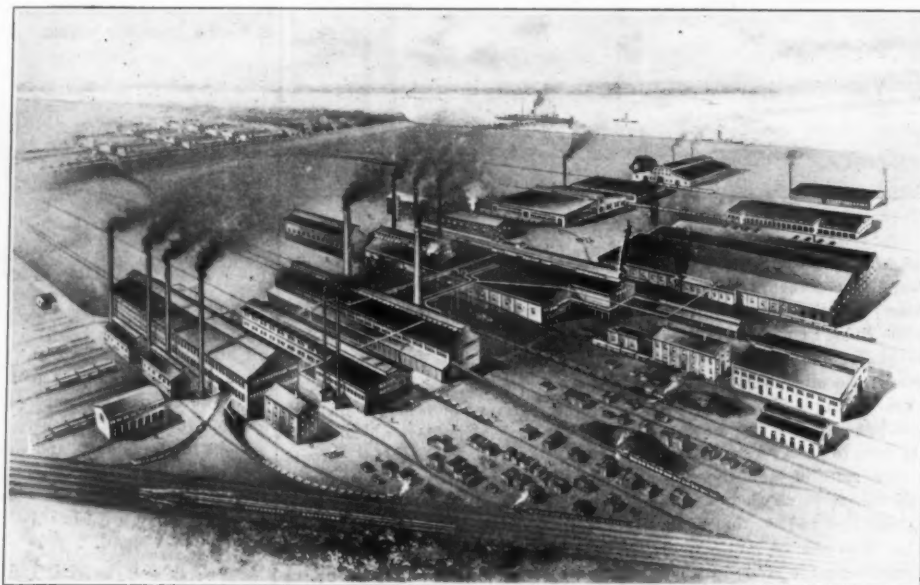
"To understand why the Lackawanna grate will burn this small coal you must understand its construction.

"The Lackawanna grate is practically rows of knifelike segments bound together with wrought-iron rods. This construction makes possible air spaces one-eighth of an inch in width, and as the segments are interlocking, a Lackawanna bar has the advantage of a solid casting, with none of the disadvantages.

"An actual test by a large corporation operating over 20 boiler-houses using barley anthracite on a variety of shaking grates showed 9% per cent. of unconsumed carbon in the ashes with the Lack-

there is opportunity for expansion and contraction without affecting the bar, and should a part of a bar become damaged it merely means a few new segments, and the grate is as good as new.

for convenience, the "Kinkora" works, because of its proximity to a village of that name. (See accompanying illustration.) Included in the buildings are a thoroughly modern steel plant with four open-hearth



KINKORA WORKS OF JOHN A. ROEBLING'S SONS COMPANY AT ROEBLING, N. J.

"The Lackawanna grate is not an experiment. In one power plant it has been in continuous use, night and day, for the past two years."

The Lackawanna Grate Bar Co., 704 Connell Building, Scranton, Pa., manufactures the Lackawanna grate.

furnaces, designed to produce the quality of steel suitable for high-grade wire, blooming and rolling mills, mills for drawing wire, shops for cleaning, annealing and galvanizing, and all the auxiliaries necessary for the production of wire from molten steel.

The additional works are on the Penn-

sylvania Railroad. Rods which are not drawn into wire at the Kinkora works are loaded upon steel cars built for the Roebbling Company and taken to the wire mills at Trenton.

The village of Kinkora being too small to provide homes for the large number of men employed at the works, the company

enters into the construction is carefully selected, and nothing but the best of workmanship passes our inspection. The parts forming the heart of the mixer are few, and, there being no intricate parts to get out of order, it does not require an experienced mechanic to operate. The mixer may be mounted on trucks or skids as de-



BARs OF LACKAWANNA GRATE AND SEGMENTS FOR BARs.

awanna grate as against a general average of 40 per cent. with the others.

"Referring to the advantage and disadvantages of solid castings, the advantage is rigidity. This the Lackawanna grate secures by its interlocking segments,

Additional Roebbling Works.

An important addition has recently been made to the works of John A. Roebbling's Sons Company which will materially increase the company's facilities for the



THE SNELL MIXER.

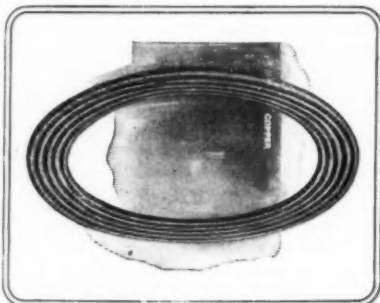
sired, with either a side or rear dump. The elevation of the loading platform is so near the ground level that it makes an easy incline upon which to wheel material. The truck wheels are so arranged that the mixer is placed between the side strips of walk after they are set ready for concrete. This can be done with any walk with a

This can be done with any walk with a

width of three feet up. Being either a side or rear dump, the mixture is dumped exactly where it is needed, thus saving much labor. The drum makes 25 revolutions per minute, thus turning the aggregate over from 70 to 100 times, giving a uniform and perfect batch of concrete in one minute." This mixer is manufactured by the R. Z. Snell Manufacturing Co. of South Bend, Ind.

Marine Type of Gasket.

The use of superheated steam, with its many new conditions, not found in the saturated steam proposition, has required many changes from past methods and materials to successfully resist the high temperature in commercial applications. In the field of gaskets for steam lines this advance has caused more or less concern and investigation to find a satisfactory substitute for the older forms of gaskets that would be kept within a reasonable cost.



MARINE-TYPE GASKET.

The Merwarth Metallic Gasket Co. of New York believes it has solved this problem with its marine type of gasket, as illustrated herewith. This gasket is composed entirely of concentric rings, of annealed copper wire, electrically welded, to complete circles, and then soldered into a flat ring to form the gasket; thus is obtained a greater body of metal to resist the cutting tendency of high-temperature steam, and at the same time is retained practically the same compressibility as is



FOUR MARBLE MONOLITHS FROM GEORGIA QUARRIES.
Each weighs more than 100,000 pounds.

found in one or two gaskets of corrugated copper or steel.

The gasket is furnished with centering ring to fit just inside of flange bolts, which facilitates installation and insures at all times the gasket being brought to its proper bearing point.

It has been successfully used on many plants for both stationary and marine service under trying conditions, and has been proven to have long life.

The company also manufactures a combination copper and lead gasket for lower

steam pressures, water service, oil lines and lines conveying liquids in which is found more or less free acid.

It is represented in Philadelphia and Southern territory by J. P. Bell, 1224 Betz Building, Philadelphia, Pa., who will furnish further information.

Marble Monoliths from Georgia.

Georgia marble has established a wide reputation, and it is of interest to call attention to a production of the Southern Marble Co., which has operated quarries at Marble Hill, Ga., for 20 years, and states that structures representing a total investment of \$10,000,000 have used marble from its quarries. Among these buildings may be mentioned the Corcoran Gallery of Art, Washington, D. C.; the Capitol, Providence, R. I.; Wellesley College Observatory, Wellesley, Mass.; Carnegie Library, Atlanta, Ga.; State Savings Bank, Detroit, Mich., and the Stock Exchange, New York. Herewith is a reproduction of a photograph of four marble monoliths, each weighing more than 100,000 pounds, which the Southern Marble Co. quarried. Some extremely interesting views of the quarries, prominent buildings in which the product has been used, and reproductions of panels, caps, stairway clocks, vestibule carvings and mausoleums are presented in a booklet which the company distributes from its office at Worcester, Mass. Quoting from this publication, the following is interesting:

"The marble is firm, strong and durable. Its color is white and white mottled. It is of crystalline formation, the crystals giving the marble the appearance of a surface covered with beautiful snowflakes. This snowflake appearance is exceedingly pleasing when given a sand-rubbed finish.

"It is nearly (98.96 per cent.) pure carbonate of lime, in this respect analyzing within 1 per cent. of the famous Parian marble of ancient times. Like the Parian, too, it hardens by exposure. Its texture is so firm and dense that it is practically impervious to moisture. Its absorption is so slight that it is difficult to compute it at

"It possesses great strength, being able to carry about 11,000 pounds per square inch."

Eureka Automatic Concrete Machinery.

Every day sees an increased demand for machinery used in manufacturing concrete products. Equipments which are automatic in their operations find great favor with users, and it is of interest to refer to the offerings of the Besser Manufacturing Co. of Alpena, Mich. This company makes machines for the production of con-



EUREKA SIDE-FACE BLOCK MACHINE.

crete blocks, sewer tile, drain tile, bricks, fenceposts, sidewalk material, etc., and all accessories and other articles that the concrete worker needs. An illustration herewith presents a view of the Eureka No. 2 side-face block machine. This is simple in construction and has but few parts, there being no gears, pinions or cogs to fill up or break. Its operation takes but a moment. The only labor required is tamping, as the machine is fully and automatically controlled with one movement



EUREKA FACE-DOWN BLOCK MACHINE.

of the lever, thus giving the greatest amount of speed. In action it is very simple, the lever being pulled toward the operator through about the one-fourth part of a circle. The one movement lowers the cores and the sides and opens the end doors at the same time. The block stands clear on the pallet, and can be instantly removed. A touch of the lever upward causes the core to raise and the mold box closes. The pallet is ribbed, so that it will not settle or allow the heaviest block to



EUREKA ROUND SEWER-TILE OUTFIT.

crack. The company states that two men can easily tamp and carry away 300 of the eight-inch blocks in a day.

A second illustration shows the Eureka No. 2 face-down machine. On this machine the cores are withdrawn vertically and are automatically controlled instead of being withdrawn by hand. One pull of the lever turns over the machine, withdraws the cores and unlocks the core box. A push of the lever closes and turns up

the mold box and puts the cores back into place, thus leaving the machine ready for the next block. One single core can be used when making blocks 16 inches long. After the block is turned over the walls are perfectly supported and there is no sag or crack; consequently, the blocks do not break or otherwise spoil.

A third illustration shows the complete Eureka round sewer-tile outfit. This machine was thoroughly tried and tested before being put on the market, and in practical use has proved simple, economical and satisfactory. The automatic core contracts and expands by the mere act of raising and lowering. There are no levers required, and there is no wheel to turn. Simply the one movement of raising (and this has to be performed in any event) in getting the core out causes it to contract. Lowering the core causes it to expand again ready for the next tile. The outer casing is in two parts, and opens out after the tile is made. The fastenings are simple and handy. Outfits can be furnished for making tile of any special size or shape and for any special thickness of wall. The standard size makes circular tile two feet long, any diameter from 6 to 36 inches, with thickness of walls from 1 1/4 to 3 inches. Both the core and the casing are made of sheet steel, rolled true, and it is claimed no amount of tamping will force them out of shape.

The Besser Manufacturing Co. distributes an illustrated publication which gives detailed information regarding the numerous concrete articles made with its machinery and descriptions of the machines themselves.

A "Factory Family."

The golden anniversary of the H. Mueller Manufacturing Co. of Decatur, Ill., was recently celebrated by a picnic given to its employees, and as a souvenir of the occasion a handsome booklet has been published depicting the leading events of the day, the history of the company's development and the life of its founder, Hieronymus Mueller. The volume also contains many interesting illustrations showing the successive buildings the company has occupied during its growth, the officers of the company, many of long-term employees, groups from various departments, interior shop views and leading features of the picnic. The company's officials, all of whom are members of the Mueller family, have always taken a deep interest in the welfare, comfort and pleasures of their employees, and indicative of this is the fact that they are generally referred to as the "Mueller Factory Family." A great many of these have grown up in the "Family," and as an appreciation of their constantly faithful services seven of them were presented with \$500 each on the day of the picnic. Money was not spared in making this volume the best that was possible, and it was published for distribution among the employees only. When large manufacturers can pause in the midst of their busy lives and think of the interests and welfare of their employees and provide them with better surroundings they accomplish a double purpose. Greater interest will be shown by the employee in his work and better-made products will be the result, while his home life will undoubtedly be influenced for the better at the same time. Such thoughtfulness brings in the end a closer mutuality of interests, higher regard, a more intense loyalty and a pride in the achievements and triumphs of their employees.

Mr. Henry G. Morton, an engineer of Little Rock, claims that an unlimited supply of pure water for that city may be obtained by sinking wells into vast sand beds between 6 and 15 miles south of the city and piping the water therefrom.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BRIDGES, CULVERTS, VIADUCTS

Johns Island, S. C.—Contract will be awarded October 20 for building bridge 102 feet long and 15 feet wide, connecting Johns Island with Wadmalaw; also two concrete bulkheads; T. F. H. Peck, chairman Township Board.*

Palatka, Fla.—Putnam bridge has awarded contract to the Converse Bridge Co., Chattanooga, Tenn., for construction of roadway across St. John's river at Palatka; cost \$54,000. (Mentioned in August.)

Richmond, Texas.—Fort Bend and Wharton counties have definitely decided to construct proposed steel bridge across the Bernard river at a cost of \$10,000. Address Fort Bend County Commissioners at Richmond. (Previously mentioned.)

Sparta, Tenn.—White and Van Buren counties have awarded contract to the Nashville Bridge Co., Nashville, Tenn., for construction of bridge at River Hill and Hodges' Ferry; total cost about \$17,000.

Williamsport, Md.—Washington & Berkeley Bridge Co. will award contract October 30 for construction of proposed bridge over the Potomac river; 15 spans; total length 1570 feet; width 30 to 38 feet; two railway tracks, driveway and footway; 10 or more arches; Edward W. Byron, secretary; Mason D. Pratt, consulting engineer, Harrisburg, Pa. (Referred to in August.)*

COAL MINES AND COKE OVENS

Austen, W. Va.—Austen Coal & Coke Co. will erect tipples at its coal mines. Company has awarded contract to the Southern Pine Lumber Co. for 75,000 feet of lumber to be used in construction.

Austen, W. Va.—Austen Coal & Coke Co. has awarded contract to Covington (Va.) Machine Co. for installation of coke-pulling machine for one block of ovens; is also building breaker and installing coal-crushing plant with elevators, etc., at No. 1 mine,

doubling capacity of power-house by adding engine built by Harrisburg (Pa.) Foundry & Machine Works, and installing 500-volt generator built by Crocker-Wheeler Company of Amper, N. J. Austen plant includes two mines with daily output of 400 tons each and 250 coke ovens. F. W. Horcher, mine superintendent, is purchaser, offices at Austen; Wm. J. Wilson is treasurer, offices at 40 Wall street, New York. All machinery has been bought for present improvements.

Belfast, Tenn.—Nathan Petty is said to be developing coal mines.

Birmingham, Ala.—Standard Fuel Co. proposes to establish plant for manufacturing coal briquettes and coke breeze. (Company was recently mentioned as having increased capital stock from \$100,000 to \$300,000.)

Bluefield, W. Va.—Crescent Fuel Co. incorporated with \$10,000 capital stock by J. F. Maynard, E. E. Carter and W. T. Cofer of Bluefield, E. W. Freeman, Freeman, W. Va., and H. W. Straley, Princeton, W. Va.

Catawba, W. Va.—Catawba Coal Co., recently noted as progressing with arrangements to develop coal properties, has elected John J. Buttermore president and manager and J. M. Herpeck secretary and treasurer.

Chattanooga, Tenn.—Southern Fuel Co., McCallie avenue and Belt Railway (recently reported incorporated), will deal in coal, coke, wood, lime and cement, wholesale and retail, in Chattanooga and accessible territory; president, John E. Patton; secretary and general manager, Henry A. Turner.

Clarksburg, Ark.—Pennsylvania Anthracite Coal Co., James W. Gearheart of Scranton, Pa., president, has bought and is developing 3200 acres of anthracite coal land. C. H. Langford is secretary of company.

Hinton, W. Va.—Consolidated Supply & Coal Co. incorporated with \$10,000 capital stock by James F. Smith, W. H. Garrett, F. K. Puckett and others.

Jarvisville, W. Va.—Landstreet Coal & Coke Co. incorporated with capital stock of \$500,000 by F. S. Landstreet of New York and Baltimore, E. L. Fuller of Scranton, Pa., and F. H. Eaton of New York. It controls Allegheny Coal Co., which owns 6000 acres of coal land in Harrison county, and will develop that property, planning to begin at once the erection of plant with daily capacity of 1000 tons of coal. Mines will be connected with Baltimore & Ohio Railroad by construction of branch. Chief engineer of Allegheny Coal Co. is J. W. Galbreath, offices in Continental Trust Building, Baltimore, Md. Main offices of Allegheny and Landstreet corporations at No. 1 Broadway, New York city, F. S. Landstreet, president of both, being in charge. (Mr. Landstreet previously mentioned by Manufacturers' Record in connection with proposed development of this property.)

Paducah, Ky.—West Kentucky Coal Co. has awarded contract to the South Side Foundry & Machine Co., Charleston, W. Va., for erection of coal tipple.

Preston county, W. Va.—North Preston Coal Co. incorporated with \$1,000,000 capital stock by Frank P. Rush of Uniontown, Pa.; Ernest L. Stoner, Marcellus L. Hasness and Judson T. Strickler, Scottsdale, Pa., and Ben A. Wirtner, Glendale, Pa. Company will develop coal lands and build a mining town in Preston county.

Wheeling, W. Va.—Shannon Coal Co. incorporated with \$50,000 capital stock by J. C. McKinley, Nelson C. Hubbard, H. B. Lockwood and others.

COTTON GINS

Gratton, Tenn.—Gratton Gin Co. incorporated with \$5000 capital stock by S. J. Bradshaw, J. A. Haffstutler, J. T. Campbell and others.

Lindsay, S. C.—Mr. Kelmess and Mr. McAtter of Riverside (not a postoffice), S. C., have installed cotton gin and sawmill.

McGregor, Texas.—A. J. Hickerson will rebuild cotton gin recently reported burned; eight-stand; approximate cost, \$9000; capacity, 100 bales per day.*

Oak Grove, La.—Oak Grove Gin Co. incorporated with \$5000 capital stock; R. A. Skinner, president; J. S. Crow, vice-president, and E. L. Wilson, secretary-treasurer; will install four-stand 70-saw gin.

Waycross, Ga.—Sea Island Cotton and Warehouse Storage Association incorporated with \$10,000 capital stock to operate cotton gins and compresses, etc., by D. A. Jordan, H. F. Jeffords, J. J. Henderson, J. H. Bennett and others.

ELECTRIC-LIGHT AND POWER PLANTS

Albany, Ga.—Albany Power Co. is reported as about to invite proposals for construction of dam to develop power and power-house to be equipped with electrical machinery for generating and transmitting electricity at Porter Shoals on Flint river, near Albany. This company's organization mentioned some months ago by Manufacturers' Record, and was referred to as planning to develop 12,000 horse-power. Messrs. Alex W. Smith, Frank L. Meufville and E. M. Underwood were mentioned as incorporators.

Bentonville, Ark.—City let contract to Benton County Hardware Co. for erection of electrical-power plant recently mentioned; contract price \$10,850.

Burlington Junction, Mo.—Burlington Junction Electric Light & Power Co. incorporated with \$6000 capital stock by D. T. Garrett, Jesse F. Robertson, T. E. Fordyce and others.

Campbell, Mo.—The Electric & Manufacturing Co. incorporated with \$30,000 capital stock by L. N. Pollock, M. D. Moss and others to operate electric-light and power plant at Campbell and other places, etc. (See item under Clinton, Ky.)

Cleveland, Tenn.—J. W. Adams and associates of Chattanooga, Tenn., have received franchise for operation of electric-light and power plant and various other plants.

Clinton, Ky.—The Electric & Manufacturing Co. incorporated with \$30,000 capital stock by A. C. Moss, R. L. Johnson and Mrs. M. E. Watson, all of Clinton, Ky., and L. N. Pollock and M. D. Moss, Campbell, Mo.; will operate electric-light and power plant at Clinton, Campbell, Mo., and other places, sell electricity for lighting and power and establish ice and cold-storage plant.

Imboden, Ark.—Arbuckle Mining & Milling Co., Binghamton, N. Y., proposes to construct dam at Imboden on Spring river and use power for operating electric railway from Imboden to Smithville and Calamine, Ark., a distance of 25 miles.

Louisville, Miss.—Louisville Light & Water Co. incorporated with \$30,000 capital stock by W. A. Strong, J. L. McCracken, W. C. Hight and others.

Madison, Ga.—City has voted \$50,000 of bonds for improvement of electric-light plant, etc. Address The Mayor.

Midland, Texas.—Midland Light Co. incorporated with \$15,000 capital stock by E. R. Bryan, F. F. Cary, George D. Elliot and C. Harbaur.

Montgomery, Ala.—Montgomery Light & Water Power Co., R. J. Chambers, general manager, will expend about \$60,000 in improvements to service between Montgomery and Tallahassee, Ala., to include installation of additional transmission line from Montgomery to water-power on the Tallapoosa river, additional banks to step up and down transformers, improved lightning arresters, etc. Company will also improve gas plant, expending about \$30,000; betterments to consist of installation of new gas arch bench with six retorts for purifying the gas and increasing output and additional scrubbers and exhausters.

Nashville, Tenn.—William E. Hamilton of Columbus, Ohio, is reported as interested in plans for extensive water-power developments and the erection of electric-light and power plant in Tennessee.

Richmond, Va.—Richmond Traction Co. has permit to erect brick substation costing \$7500; John T. Wilson, contractor.

Smithfield, N. C.—Town Commissioners have appointed N. M. Lawrence, N. B. Grant and E. H. Brooks a committee to investigate cost of constructing electric-light plant, water-works and sewerage system.

Smithville, Ark.—Arbuckle Mining & Milling Co., Binghamton, N. Y., is reported as to build dam on Strawberry creek, near Smithville, to be 300 feet long and 13 feet high. Power will be used to generate electricity for use in crushing ore at various zinc mines, especially at Smithville and Calamine, Ark. Company also proposes to construct another dam at Imboden on Spring river to furnish power for operating electric car line.

FOUNDRY AND MACHINE PLANTS

Asheville, N. C.—S. Sternberg has purchased the Piedmont Supply & Foundry Co. and will operate the plant as the Sternberg

Supply & Foundry Co., probably making improvements.

Baltimore, Md.—Charles H. Birmingham & Co., brass founders, 231 South Exeter street, It is reported, have purchased from five to six acres of land on Washington road at junction of Baltimore & Ohio and Pennsylvania railroads and will establish brass foundry, wire mill, rolling mill and metal-testing plant.

Birmingham, Ala.—Furnace Hot Pot Lining Co. organized with \$50,000 capital stock to manufacture and deal in hot pots for carrying away slag and refuse from furnaces; Dr. A. C. Miller, president; A. W. Snyder, vice-president and general manager; J. W. Bush, treasurer; George E. Bush, secretary, and A. E. Johnson, assistant general manager.

Bristol, Va.—Tenn.—Henry Ebert and L. P. Onkes contemplate establishment of the Twin City Boiler Works.

Guthrie, O. T.—Keller Steam Economizer Co. incorporated with \$50,000 capital stock by T. F. McKennon of Guthrie, R. C. Ralston and Garner Curran.

Joplin, Mo.—Keller Steam Economizer Co., 304 Bartlett Building, recently noted to erect building and install machinery for the manufacture of feed-water heaters, will expend about \$45,000 in installation of entire plant.

Nashville, Tenn.—Tennessee Brass Foundry will establish plant to manufacture brass, bronze and aluminum castings. Frank McKinstry will be superintendent; offices at 1612 Thompson street.

New Orleans, La.—Valley Scrap Iron & Material Co. organized with capital stock of \$3000; Abram Mermelstein, president; Samuel Mermelstein, secretary-treasurer.

Parkersburg, W. Va.—Davis Electric Co. incorporated with \$350,000 capital stock by J. Mentor Caldwell, Henry W. Dils, Jesse R. Davis and others to manufacture and deal in dynamos, batteries and other electrical machinery.

Phoenix, Va.—Sayre Bros. incorporated with \$50,000 capital stock to manufacture castings; S. H. Sayre, president; C. R. Sayre, treasurer, and C. R. Hopkins, secretary.

Raleigh, N. C.—T. F. Brockwell will erect building to be equipped as gunsmith shop.

Richmond, Va.—C. Hamilton Read contemplates establishing plant for manufacturing a patented car coupler.

Roanoke, Va.—Rockhill Foundry & Machine Co. and Roanoke Foundry & Machine Co. have consolidated as the Roanoke Iron Works, with \$100,000 capital stock; H. E. Obenshain, president; C. A. Moomaw, secretary-treasurer, and H. B. Rockhill, general manager.

Salisbury, N. C.—American Automatic Switch Co. incorporated with \$100,000 capital stock to manufacture all kinds of switches for steam, electric and motive power railways, etc., by P. H. Thompson, F. M. Thompson, D. L. Ary, N. B. McCanness and others.

Somerset, Ky.—Cincinnati, New Orleans & Texas Pacific Railway, H. E. Warrington, chief engineer, Cincinnati, Ohio, is reported to double size and capacity of shops at Somerset.

St. Louis, Mo.—Domestic Gas Co., incorporated with \$300,000 capital stock, will establish plant for manufacturing gas-producing machinery, expending about \$50,000; H. L. Horton, president; A. L. Vaughn, vice-president; W. M. Kavanaugh, treasurer; H. N. Samstag, secretary; Walter P. Babb, assistant secretary, and M. Laux, general manager; main offices, Southern Trust Building, Little Rock, Ark.

Thomasville, N. C.—Thomasville Machinery Co. incorporated with \$10,000 capital stock to conduct general repair shop and deal in engines, boilers, sawmills and all kinds of machinery, etc., by J. H. Barnes and Charles E. Bennett, both of High Point, N. C., and R. W. Welborn, Greensboro, N. C.

Winchester, Ky.—Eagle Casting Co., recently reported to establish plant, will engage in the production of gray iron, semi-steel and brass castings; capacity, 10 tons daily; frame building will be erected 126x130 feet; cost of building \$3000; cost of machinery \$4000; F. G. Cornell, general manager. Company has incorporated with capital stock of \$15,000.*

ICE AND COLD-STORAGE PLANTS

Bastrop, La.—J. H. Allen will establish ice factory.

Beaumont, Texas.—Beaumont Ice, Light & Refrigerating Co. has decided to install additional machinery, increasing its daily output of ice to 150 tons.

Bogalusa, La.—M. K. Pearce, Whitecastle, La., will establish 50-ton ice plant at Bogalusa.

Clinton, Ky.—The Electric & Manufacturing Co. incorporated by A. C. Moss, R. L. Johnson and others to establish ice and cold-storage plant, etc. (See item under "Electric-Light and Power Plants.")

Dallas, Texas.—Boedeker Manufacturing Co., 213 South Erway street, recently reported incorporated, will establish 50-ton ice plant in connection with ice-cream factory; is erecting two-story building 60x150 feet and one-story building 90x50 feet; cost of buildings \$25,000; cost of machinery \$35,000; president, F. W. Boedeker; vice-president, G. L. Boedeker; secretary-treasurer, J. A. Smith; engineer, J. S. Jacobs.

Estherwood, La.—Frank Klildeaux is reported to install six-ton ice plant.

Hattiesburg, Miss.—Southern Ice Co. recently incorporated to establish ice plant, has not yet elected officers or employed engineer; frame building, 54x20 feet, will be erected; machinery will be installed at cost of \$24,000; capacity of plant 50 tons. Frank McClure is among those interested.

Mount Vernon, Mo.—Farmers' Elevator & Cold Storage Co., recently reported incorporated, will erect building 30x50 feet; president, J. W. McCanse; other officers are J. A. Orr and W. H. Johnson.*

Newport News, Va.—General Supply Corporation will probably be organized with \$1,000,000 capital stock to establish ice plant and take over the City Coal & Wood Co. It is understood that C. C. Smith will be president, W. H. Kellogg treasurer and J. W. Kellam secretary.

Oklahoma City, O. T.—New State Brewing Co., H. Y. Thompson, president, is planning installation of cold-storage equipment. (See item under "Miscellaneous Manufacturing.")

Little Rock, Ark.—Retail Grocers' Ice Co., M. Kirst, president, will erect addition to plant, increasing daily capacity from 50 to 150 tons. York Manufacturing Co., York, Pa., has contract to furnish 100-ton ice machine. Between \$50,000 and \$60,000 will be expended.

Norfolk, Va.—Arctic Ice Co. incorporated with \$50,000 capital stock by Louis Feuerstein (president), Peter Wright and R. P. Waller.

Shelbyville, Tenn.—General Ice Co. incorporated with \$100,000 capital stock by J. C. Allan, C. S. Blue, T. N. Greer and others.

Washington, D. C.—Washington Market Co., Edward R. Tinker, president, and Frank G. Wilkins, secretary, Center Market, 7th street and Pennsylvania avenue N. W., will hold meeting of stockholders on October 21 to decide whether to authorize issue of \$300,000 in bonds to provide for erection of buildings and purchase of machinery for manufacture of ice and for cold-storage plant. Structure will be three stories high, 150x300 feet, and erected in block bounded by 11th, 12th, E and F streets S. W. (This enterprise previously mentioned.)

IRON AND STEEL PLANTS

Ensley, Ala.—Tennessee Coal, Iron & Railroad Co. has completed the repairs to No. 1 furnace, which ceased operations about 90 days ago. Plant will be blown in during the present week. It has been thoroughly overhauled and relined. Company now has six furnaces in blast, but it is understood No. 3 furnace will soon be blown out for repairs. Improvements have been in charge of J. S. Collier, superintendent; company's general offices at Birmingham, Ala.; New York offices at 100 Broadway.

Jenifer, Ala.—Jenifer Coal & Iron Co. has filed a mortgage for \$400,000, and it is understood this action will be followed by the blowing in of the furnace, which has an annual output of 50,000 tons, and of the 200 coke ovens, which have an annual capacity of 50,000 tons. W. H. Weller of Anniston, Ala., is president.

Norfolk, Va.—Norfolk Iron Manufacturing Co., previously reported incorporated with \$100,000 capital stock, will soon begin erection of proposed iron works on Eastern branch of Elizabeth river. Building will be constructed of steel sheeting. Railroad facilities have been provided, and machinery is now being received; M. H. Logue (formerly of Youngstown, Ohio), president; George W. Dusch (formerly of Wheeling, W. Va.), vice-president and secretary; Walter F. Flynn (formerly of Youngstown, Ohio), treasurer; W. D. Murray (formerly of Detroit, Mich.), general manager, and W. J. Storey (formerly of Youngstown, Ohio),

consulting engineer. Address the general manager at Norfolk.

LUMBER-MANUFACTURING PLANTS

Annona, Texas.—Annona Lumber Co. will rebuild lumber kilns recently reported burned; cost of buildings \$500; 18 kilns; daily capacity 25,000 feet lumber; F. W. Jackson, manager.

Batson, Texas.—Robertson Lumber Co., recently reported incorporated, will establish mills for the production of rough pine and hardwood lumber; daily capacity 20,000 feet. Buildings will be erected and equipped at cost of about \$500; president, J. B. Hooks; secretary, Jack Dies; manager, R. M. Robertson.

Dayton, Texas.—Dayton Lumber Co. will increase capital stock from \$100,000 to \$200,000. Company has recently purchased several tracts of timber land and will probably undertake development.

Jackson, Ala.—McIntyre Lumber Co. has purchased the milling plant of the C. W. Zimmerman Manufacturing Co. It is understood that the new owners will not rebuild sawmill of the C. W. Zimmerman Manufacturing Co., reported burned in July, but will install sawmill at present plant, which will double capacity.

Jefferson, Texas.—Clark & Boice will rebuild planing mill recently reported burned at a loss of \$20,000.

Kansas City, Mo.—Texas & Louisiana Naval Stores Co. incorporated with \$100,000 capital stock by W. B. Gillican, W. F. Ryder, C. B. Sweet and others.

Lake Charles, La.—Bear Creek Lumber Co., reported incorporated in August with \$50,000 capital stock, has purchased 2800 acres of timber land at \$33,930. M. E. Vickers, grantor, reserves right to turpentine the trees; M. J. Martin, president.

Lattimore, N. C.—Lattimore Lumber Co. incorporated with \$25,000 capital stock by L. V. Lee, I. P. Lattimore, J. B. Lattimore, J. F. Alexander and others.

Lindsay, S. C.—Mr. Kelmes and Mr. McAtter of Riverside (not a postoffice), S. C., contemplate establishment of drykiln and planing mill in connection with gin and sawmill recently installed.*

Mayland, Tenn.—The Big 3 Heading Co. will establish mill plant for the production of sawed beer heading. Mills will be erected in several timber districts at cost of about \$1500 each; president, W. Cooper; secretary-treasurer, Charley Beaty; manager and engineer, H. W. Doney. (Recently mentioned.)*

Mineral Wells, Texas.—Reed-Pangle Cedar Co. incorporated with \$10,000 capital stock by J. C. Pangle and D. A. Faubion, both of Mineral Wells, and M. H. Reed, Marble Falls, Texas.

Nashville, Tenn.—Cumberland Land & Timber Co. incorporated with capital stock of \$100,000 by Henry Sperry, George A. Washington, E. A. Lindsey, J. H. Baird, T. E. Allen and others.

Natchitoches, La.—D. J. Grigsby has sold to Northern capitalists, for development by cutting and operating sawmills, timber lands estimated to contain 27,000,000 feet of lumber.

New Orleans, La.—Western Naval Stores Co. incorporated with \$50,000 capital stock; W. B. Gillican, president; E. A. McCoy, vice-president, and W. E. Payne, secretary-treasurer.

Norfolk, Va.—Frank Hitch will rebuild lumber mills recently burned; will erect frame one-story building, 150x50 feet, at cost of about \$6000; cost of machinery to be installed \$20,000; capacity of mill 100,000 feet pine lumber per day.

Pearl, La.—Pearl Lumber & Oil Development Co., incorporated with \$200,000 capital stock, will make a specialty of railroad timber, car sills, bridge timber and rough finish. Company has begun operation of sawmill with daily capacity of 30,000 feet; Wm. P. Smith, St. Louis, Mo., president and manager; J. Hesterberg, Reading (P. O. Cincinnati), Ohio, vice-president; C. E. McKee, Chicago, Ill., secretary, and A. M. Stearns, Lockland, Ohio, treasurer.

St. Louis, Mo.—Eagle Land & Lumber Co. incorporated with \$100,000 capital stock by Walter Sutton, Bettie Sutton, Cora Dunaway and others.

Wartrace, Tenn.—Wartrace Lumber & Manufacturing Co. will establish plant for the production of rough and dressed lumber; will also manufacture buggy-gear stock, reaches, crossbars, neck yokes, singletrees and spokes; machinery purchased; will erect frame building with iron sills, 100x50 feet; cost of building \$1000; cost of machinery \$4000; architect and engineer, Locke Clay-

ton. (Company incorrectly named in recent incorporation notice.)

Waycross, Ga.—Waycross Cypress Mill Co., capitalized at \$100,000, will establish sawmill and expects to begin operations by January 1. Company will also manufacture fruit and vegetable crates and a cheap grade of furniture. Contract for digging lake for log storage has been awarded.

Yazoo City, Miss.—Maley Hardwood Lumber Co., J. S. Grant, secretary, Edinburg, Ind., will establish band-saw mill with daily capacity of 60,000 feet at Yazoo City to develop timber lands near Carter, Miss. Mill site comprises eight acres.

MINING

Arvonía, Va.—Victoria Buckingham Slate Manufacturing Co., composed of Dayton (Ohio) capitalists, will develop about 75 acres of slate lands. (See item under "Miscellaneous Manufacturing.")

Ashboro, N. C.—Dougan Davis, E. M. Armfield, H. C. Briles and Thomas Farlow, all of High Point, N. C., have purchased the Hoover Hill gold mines.

Atlanta, Ga.—Marsh Mining Co. incorporated with \$150,000 capital stock by Spencer S. Marsh, Mrs. Adelaide L. Adair and McAllen B. Marsh to develop mines in North Georgia.

Cleveland, Ga.—Canadian-American Loud Gold Mines, Ltd., lately reported incorporated, will develop lands containing placer and quartz gold deposits. William Murray, president and general manager, Cleveland; D. McCowan and Chris Campbell, vice-presidents; J. E. Thomas, secretary, and A. L. Bond, treasurer, each of Winnipeg, Canada; E. E. N. Bertram, engineer in charge, Cleveland. Will purchase electric power dredging equipment and pumps.*

Del Rio, Tenn.—Del Rio Mining Co. incorporated with \$50,000 capital stock by C. B. Mims, J. N. Adams, W. D. McSweeney and others.

Floyd, Va.—Toncray Copper Co. is name of company recently noted to have acquired copper mines near Floyd. Copper smelter will be operated; capacity of plant 50 tons; engineer, Thomas Stephens; managers, Louis Straus and William Spence; principal address, 60-62 New street, New York.

Franklin, Tenn.—J. W. Reid and Dr. H. P. Cochran are considering the development of phosphate deposits.

Gaffney, S. C.—Reported that N. C. Snead is interested in plans for developing lead deposits.

Gastonia, N. C.—Cinch Valley Barytes Co., Honaker, Va., E. H. Jones, vice-president and general manager, is developing barytes deposits on Crowders mountain, N. C.; superintendent, Wm. P. Vincent.

Kansas City, Mo.—Helen Mining Co. incorporated with \$100,000 capital stock by A. J. Baker, Charles W. Lake, Theodore Remley and others.

Montgomery, Ala.—Janney Mining & Development Co., recently reported incorporated, has elected A. A. Janney, Jr., president, and A. J. Tarvin of Ohatchie, Ala., secretary and treasurer; present headquarters, Montgomery; plans for developments not completed.

Roanoke, Va.—Fellers Stone Co. incorporated with \$25,000 capital stock. M. L. Fellers is first vice-president and E. B. Fishburn secretary-treasurer.

Smithville, Ark.—Reported that Lincoln Mining and Milling Association, Lincoln, Ark., has installed crusher and mill and is now developing lead and zinc deposits near Smithville.

MISCELLANEOUS ENTERPRISES

Altus, O. T.—Telephone System.—Quannah & Mangum Telephone Co. incorporated with \$15,000 capital stock by E. B. Jeffrey and J. A. Henry of Altus, R. W. Smith, Ennis, Texas, and others.

Amarillo, Texas.—Land Improvement.—Will A. Miller Land & Immigration Co. incorporated with capital stock of \$50,000 by Will A. Miller, Jasper Hand, M. F. Taylor and others.

Argyle, Ga.—Oil Wells.—South Georgia Oil & Gas Co. incorporated with \$100,000 capital stock to develop oil wells by Walter T. Dickerson, R. G. Dickerson, H. M. Pelgier, Jesse R. Booth and others.

Baltimore, Md.—Belting and Packing.—Maryland Belting & Packing Co., 511 South Dallas street, has been incorporated with capital stock of \$100,000 by Samuel T. Owings, George D. Iverson, Jr., and Harry C. Lawrence.

Baltimore, Md.—Coffee-roasting Plant.—J. W. Laughlin Company, coffee roaster, 34

South Calvert street, has called meeting of stockholders to ratify increase of capital stock from \$10,000 to \$50,000 and change name to Bonsai Coffee Co.

Bay City, Texas.—Drainage.—City will vote October 16 on establishment of drainage district on east side of Colorado river and issuance of bonds for building levees, etc. Address The Mayor.

Binger, O. T.—Telephone System.—Oakdale Telephone Co. incorporated with capital stock of \$5000 by C. H. Otey, W. A. Thompson, Walter Cook and others.

Birmingham, Ala.—Garage.—Birmingham Garage Co. incorporated with capital stock of \$3000; Frank C. Knatz, president, and F. T. Shepard, Jr., secretary-treasurer.

Blackburn, O. T.—Telephone System.—Daisy Mutual Telephone Co. incorporated with \$5000 capital stock by George W. Kinner, J. O. Susley, Thomas Morris & Lewis Soper.

Brady, Texas.—Cotton Compress.—Brady Compress Co. incorporated with capital stock of \$35,000 by W. B. Crothers, D. F. Savage, Thomas Bell, H. T. Williams and W. J. Neals.

Britton, O. T.—Telephone System.—Britton & Rural Telephone Co. incorporated with \$3000 capital stock by Dr. B. F. Stewart and Henry Halsey, both of Britton, and George W. Collett, Edmond, O. T.

Buena Vista Springs (not a postoffice), Tenn.—Amusement Park.—James L. Glass (general manager Wonderland Park Co.), Toledo, Ohio; Sol Trauerman, Memphis, Tenn., and L. F. Ingersoll, Pittsburg, Pa., are considering establishment of park at Buena Vista Springs, expending about \$125,000; amusement features to include shoot-the-chute, scenic railway, roller coaster, etc. It is also stated that a \$100,000 hotel will be built.

Buffalo, Mo.—Hardware.—Buffalo Hardware Co. incorporated with \$10,000 capital stock by Wilburn Smithpeter, John N. Davidson and Lydia Smithpeter.

Carlton, O. T.—Townsite.—Carlton Townsite Co. incorporated with \$10,000 capital stock by Joseph W. Gay, Gibson W. Strain and Irving Page.

Clarksburg, W. Va.—Natural-gas Supply.—Fair Grounds Improvement Co., offices in Jacobs Building, has drilled gas well and will lay pipes to supply New Fair Grounds addition, one mile from corporate limits. Piping has not been contracted for.*

Cleveland, O. T.—Oil and Gas Wells.—Ozark Oil & Gas Co. incorporated with \$300,000 capital stock by A. B. Greenbow, Vol Williams and J. J. Skinner.

Columbus, Miss.—Telephone System.—Fayette Telephone Co., Fayette, Ala., has applied for franchise to construct telephone system in Columbus.

Dalton, Ga.—Laundry.—Dick Donahue has purchased the Dalton steam laundry, which will be improved and operated.

End, O. T.—Printing.—Eagle Press Co. incorporated with \$15,000 capital stock by W. I. Drummond, Mamie Drummond and M. T. Sexsmith.

Fort Worth, Texas.—Terminals.—St. Louis Southwestern Railway is understood to have decided to expend about \$500,000 in establishing proposed freight terminals at Fort Worth, improvements to include grading, yard tracks, two-story brick freight warehouse, steel spans on concrete masonry piers and abutments across Trinity river, etc.; aggregate cost of site, \$110,000; M. L. Lynch, chief engineer, Tyler, Texas. (Referred to in August.)

Glen Jean, W. Va.—Oil and Gas Wells.—Chapman Oil & Gas Co. incorporated with \$50,000 capital stock by John B. Hoffman, John Faulkner, W. E. Dugans and others.

High Point, N. C.—Telephone System.—Richford Telephone Co. incorporated with \$12,000 capital stock by D. M. Hayworth, Jacob Mock, J. B. Payne, Yancey F. Cecil and others.

Hobart, O. T.—Telephone System.—Mission Telephone Co. incorporated with \$5000 capital stock by D. C. Enochs, J. L. Burdette and S. B. Christy.

Huntington, W. Va.—Engineering.—Leete-Maupin Engineering Co. incorporated with \$5000 capital stock by A. B. Maupin, J. M. Oliver, Thomas A. Wiatt and others.

Huntington, W. Va.—Waterproofing.—General Waterproofing Co. incorporated with \$10,000 capital stock by H. A. Schaub, J. M. Hawkins, F. B. Thornburg and others.

Leesburg, Fla.—Orange Cultivation.—Eclipse Orange Grove Co. incorporated with capital stock of \$100,000; E. H. Mote, president, and William Hocker, secretary-treasurer.

Lynchburg, Va.—Heating Plant.—Odd Fel-

lows' Orphanage, Hill Montague, Richmond, Va., president, will change heating apparatus from hot-air to steam and make other improvements, expending about \$10,000.

Manteo, N. C.—Telephone System.—Roanoke Island Telephone Co., recently reported incorporated by Theodore S. Meekins, R. U. Smith, S. C. Griffin and others, has not yet elected officers.*

Miami, Fla.—Transportation.—Dade Transit Co. incorporated with capital stock of \$10,000 to conduct general transportation enterprises—automobiles, ships, etc.; Kirk Munroe, president; A. A. Boggs, secretary.

Mobile, Ala.—Locks.—P. H. O'Brien, Anniston, Ala., is lowest bidder at \$350,275 and at \$389,725.25 for construction of locks Nos. 2 and 3, respectively, on the Tombigbee river at Cherokee Landing.

Mountain City, Tenn.—Hardware.—Mountain City Hardware Co. incorporated with \$15,000 capital stock by J. S. Mitchell, J. Walter Wright, W. T. Smythe and others.

Mount Vernon, Mo.—Grain Elevator.—Farmers' Elevator & Cold Storage Co., recently reported incorporated, will erect building 30x50 feet; president, J. W. McCassey; other officers are J. A. Orr and W. H. Johnson.*

Newport News, Va.—Coal and Wood.—General Supply Co. will probably be organized with C. C. Smith, president, to take over the City Coal & Wood Co., etc.; capital stock \$1,000,000. (See item under "Ice & Cold Storage.")

Oak City, N. C.—Laundry.—Oak City Laundry Co. incorporated with \$25,000 capital stock by W. S. West, J. G. Brown, S. T. West and E. C. Richardson to acquire and continue to operate the Oak City Laundry.

Oklahoma City, O. T.—Oil Wells.—Columbia Oil & Development Co. incorporated with \$500,000 capital stock by A. V. Snell of Oklahoma City, Charles C. Lancaster and Herbert E. Smith, both of Washington, D. C.

Orange, Texas.—Rice Farm and Irrigation Plant.—I. H. Kishi and G. Hagiya, both of Japan, have secured five-year lease from Des Moines Rice Canal Co. for rice farm, consisting of 3500 acres, irrigating plant, canal, etc., in Orange county. It is proposed to purchase new farming implements, increase pumping facilities, extend canal, etc. W. I. Bettis, Houston, Texas, will be in charge of engineering work.

Perry, O. T.—Oil and Gas Wells.—Consolidated Oil & Gas Co. incorporated with \$100,000 capital stock by J. E. Dolezal, E. D. Davis, Fred C. Seids and others.

Pine Bluff, Ark.—Gas Plant.—Southern Acetylene Co. incorporated with \$10,000 capital stock; George P. Darby, president; W. P. Imon, vice-president, and E. C. Lane, secretary-treasurer.

Pine Bluff, Ark.—Levee Construction.—Contract will be awarded November 16 for constructing 248,000 cubic yards of levee work opposite Pine Bluff on Arkansas river; W. D. Connor, Captain, Engineers, Riegler Building, Little Rock, Ark.*

Reldsville, N. C.—Land Improvement.—Highlands Realty & Improvement Co. incorporated with \$50,000 capital stock by John D. Huffines, Fred A. Silver and Robert I. Dickens.

Sanford, Fla.—River Improvement.—Sanford & St. Johns River Improvement Co. incorporated with \$12,000 capital stock; Bert Fish, president, and Charles H. Campbell, secretary-treasurer.

Sanford, N. C.—Construction.—Lee County Building and Construction Co. incorporated with \$50,000 capital stock by R. T. Walker of Sanford; W. J. Stephenson, Wise, N. C., and J. B. Reid, Littleton, N. C.

Savannah, Ga.—Land Improvement.—Continental Improvement & Development Co. organized with \$250,000 capital stock, will develop 600 acres of land in suburbs of Savannah; John E. Trible, president; Harry D. Willard, vice-president, and George M. McGreevy, secretary-treasurer, all of Baltimore, Md.; offices in Gaither Building, 111 North Charles street, Baltimore, Md.

Sedalia, Mo.—Rice Lands.—Arkansas Rice Land Development Co. incorporated with capital stock of \$45,000 by Julius Reiffelsen, Richard N. Lower and Truman T. Viets.

Seneca, S. C.—Telephone System.—Reported that the Chamber of Commerce, T. M. Lowery, president, will organize an independent company to install telephone exchange.

Seward (P. O. Bethania), N. C.—Telephone System.—Doster Telephone Co. incorporated with \$3000 capital stock by A. E. Shore, J. A. Wall, B. M. Dubb and others.

St. Louis, Mo.—Construction Company.—Webster Realty & Construction Co. incorporated with capital stock of \$10,000 by Austin P. Oliver, George W. Brooks, Leroy F. Carver and Alice M. Carver.

St. Louis, Mo.—Rawlins Cienzene Co. incorporated by Clara C. Day, Thomas J. Kernan and Emily Day.

St. Louis, Mo.—Construction.—M. Eysell Construction Co. incorporated by Moritz Eysell, Edward Nelson and E. Eysell.

Tiptonville, Tenn.—Land Improvement.—West Tennessee Land Co. incorporated with \$125,000 capital stock by F. W. Moore, S. Waddell, R. Z. Taylor and J. R. Drason.

Wakenda, Mo.—Elevator.—Wakenda Elevator Co. incorporated with \$4000 capital stock by Otis Adams, Thomas Singleton, H. D. Hartman and others.

Washington, D. C.—Printing and Book-binding Plant.—H. L. & J. B. McQueen, 1108 E street N. W., incorporated with capital stock of \$25,000 to conduct printing, publishing and bookbinding plant by Hoel L. McQueen, John B. McQueen, Katherine R. McQueen, Edward E. Benton and John H. Moss, Jr.

Waxahachie, Texas.—Printing Plant.—Southern Printing Co. incorporated with \$20,000 capital stock by P. L. Stephenson, T. E. Hudson, C. E. Schuster and George Bayliss.

Webster Springs, W. Va.—Oil and Gas Development.—Webster Springs Heat & Light Co. incorporated with \$25,000 capital stock by J. M. Hooker, William Harry, J. S. Berry and others.

MISCELLANEOUS MANUFACTURING PLANTS

Arvonla, Va.—Slate Plant.—Victoria Buckingham Slate Manufacturing Co. (composed of Dayton, Ohio, capitalists, with \$200,000 capital stock) will establish plant for manufacturing slate billiard and laboratory table tops, blackboards, school slates, acid vats, electric switchboards and electrical insulating apparatus of various kinds, etc. Company has secured about 75 acres of slate lands, which will be developed, and about 75 acres additional will be acquired on which to erect cottages for workmen.

Avery Island, Ga.—Canneries, Sauce Factories, Fisheries, etc.—The McIlhenny Company of Avery Island, New York and other cities is reported as planning the acquisition of the tobacco manufacturing enterprise of E. McIlhenny's Sons and the canning and packing enterprises of McIlhenny Canning & Manufacturing Co. It is stated that a new company will be organized with capital stock of \$10,000,000, E. A. McIlhenny, president, and Frederick Kopf, vice-president, both of New York. Besides lands and factories, the company will operate a fleet of more than 50 fishing boats, employing 1000 persons, to obtain oysters, shrimp and other sea foods for its plants.

Bainbridge, Ga.—Sand-lime Brick Plant.—S. J. Warren will rebuild sand-lime brick plant, recently burned.

Baltimore, Md.—Paper-bag Plant.—Paper Mills Co., manufacturer of paper bags, M. H. Elchberg, manager, Lombard and Frederick streets, Baltimore, Md., will move its Atlanta (Ga.) plant to Baltimore, provided the city will agree to close a street which divides the lot where it wants to build. The company desires to erect a structure two stories high, 200x300 feet, to be constructed either of reinforced concrete or some other heavy construction. Its machine shop operated in connection with the plant will also be moved to Baltimore. The present capacity of the branch plant in Baltimore is one carload of paper bags daily, and the new plant will have double this capacity and employ from 200 to 300 hands.

Birmingham, Ala.—Candy Factory.—Boston Candy Co. incorporated to establish candy factory; Andrew Collas, president and treasurer, and George Pappas, vice-president and manager.

Boydton, Va.—Grist Mill.—H. L. Turpin and S. W. Simmons contemplate establishing grist mill.

Bridgeport, Texas.—Brick Plant.—Wise County Brick Co., recently reported incorporated with \$60,000 capital stock, has elected C. W. Martin, Fort Worth, Texas, president and J. V. Montrief secretary. Machinery sheds, drier and kilns will be erected at cost of \$15,000 for buildings and \$15,000 for machinery; equipment purchased; capacity of plant 30,000 brick daily.

Buffalo, W. Va.—Brick and Tile Plant.—Buffalo Brick & Tile Co. incorporated with \$10,000 capital stock by M. C. Nash, C. H. Hardy, E. D. McCoy and W. F. Johnson of Buffalo and R. E. McCabe, Charleston, W. Va.

Charlotte, N. C.—Refinery.—Swift & Co. (main offices, Chicago, Ill.) are completing plant for refining crude cottonseed oil, used for manufacturing lard and crude soap; previously mentioned. Refining plant consists of three-story building, containing five tanks

holding 85,000 pounds, nine holding 150,000 pounds each, and several smaller ones; on outside, four storage tanks with capacity of 4,000,000 pounds each; two with capacity of 1,750,000 pounds, and three holding 900,000 pounds each, making a total storage capacity of 22,200,000 pounds of refined oil and soap; capacity, 1000 barrels of oil daily. Company will operate 100 tank cars, with round-trip capacity of 16,000 pounds each. It is also proposed to erect soap factory in the near future; G. B. Shuler, resident manager; B. H. Stevens, engineer.

Charlotte, N. C.—Salve Factory.—Rose-O-Leve Medical Co. incorporated with \$25,000 capital stock by A. Thies, E. A. Thies and W. T. Wohlford.

Cherokee, O. T.—Alfalfa Mill.—Alfalfa Meal & Milling Co. has awarded contract to Charles A. Tanpa, Oklahoma City, O. T., for installation of alfalfa mill costing \$20,000.

Columbus, Ga.—Syrup Refinery.—Penick & Ford, New Orleans, La., are reported to establish branch in Columbus, with J. Ralston Cargill in charge.

Dallas, Texas.—Ice-cream Factory.—Boedeker Manufacturing Co., 213 S. Ervay street, recently reported incorporated, will establish plant for manufacture of ice and ice cream; two-story building, 60x150 feet, and 60x50-foot one-story building are being erected; cost of buildings, \$25,000; cost of machinery, \$35,000; daily capacity, 1000 gallons ice cream; president, F. W. Boedeker; vice-president, G. L. Boedeker; secretary-treasurer, J. A. Smith; engineer, J. S. Jacobs.

Devine, Texas.—Bakery.—L. Jungman, Castroville, Texas, will build cement-block bakery.

Elizabeth City, N. C.—Bottling Works.—Pepsi Cola Manufacturing Co., Wilmington, N. C., will establish bottling plant in Elizabeth City.

Gadsden, Ala.—Commercial Club, Chas. S. Ward, president, is negotiating for establishment of galvanized-iron works by company now seeking location in the South.

Glen Morris, Md.—Flint Mill.—Glen Morris Supply Co. will rebuild mills recently reported burned; plans not yet perfected; daily production to be 12 tons ground flint, etc.*

Guthrie, O. T.—Sadiron.—Lucas Sadiron Co. incorporated with capital stock of \$50,000 by Carl S. Glitsch of Oklahoma City, O. T.; Thos. H. Arey and Herbert Howell of Belleville, Ill.

Houston, Texas.—Manufacturing.—Reported that the Superba Manufacturing Co., Thomas O. Farrington, president, Chicago, Ill., will establish plant in Texas.

Huntsville, Ala.—Cannery.—Robert M. Troy and others contemplate establishment of tomato cannery; capacity, about 100,000 cans per season; address, care of Huntsville & Monte Sano Improvement Co.*

Jasper, Tenn.—Portland-cement Plant.—Southern States Portland Cement Co. is reported as investigating with a view of building branch Portland-cement plant near Jasper; now operates large plant at Rockmart, Ga.

Kansas City, Mo.—Brick Plant.—Missouri-Kansas Shale Brick Manufacturing Co. incorporated with \$250,000 capital stock by John W. Neff, A. R. O'Brien and Charles A. DeHaven.

Keyser, W. Va.—Bakery.—C. W. Stewart, C. R. Hodges, F. B. Snyder and others have purchased the Koelz Bakery and will double capacity of bakery and ice-cream plant. Mr. Stewart will be manager.

Lynchburg, Va.—Tobacco Factory.—Company has been organized to manufacture tobacco and cigars by G. N. Booker (president), W. J. Morrisett and J. B. Strachan.

Macon, Ga.—Bottling Plant.—Beddingfield-Fleischer Company incorporated with capital stock of \$15,000 to operate bottling plant by Julius Fleischer, William Beddingfield and E. W. Lipford.

Milledgeville, Ga.—Brick Plant and Pottery.—Baldwin County Brick & Pottery Co., recently reported incorporated, will establish plant for the manufacture of building brick; capacity 40,000 brick per day; will add sewer-pipe manufacturing later; president, E. L. Barnes; secretary and manager, A. A. Vaughan; engineer and architect, M. M. Winter.

Montgomery, Ala.—Gas Plant.—Montgomery Light & Water Power Co., R. J. Chambers, general manager, will expend about \$50,000 in improvements to gas plant, including installation of new gas arch bench with six retorts for purifying the gas and increasing output and additional scrubbers and exhausters. (See item under "Electric-light and Power Plants.")

Nashville, Tenn.—Portland-cement Plant.—

William E. Hamilton of Columbus, Ohio, is reported as interested in plans for building large Portland-cement plant in Tennessee.

Norfolk, Va.—Bakery.—Fender Grocery Co. will erect bakery 21x76 feet.

Okeene, O. T.—Cement Plant.—J. C. Fisher will establish cement-manufacturing plant with capacity of 300 tons daily. Building, 320x80 feet, will be erected at cost of about \$20,000; cost of machinery, \$15,000; materials and machinery purchased; architect, M. A. Ashby. (Recently mentioned as gypsum mill.)

Oklahoma City, O. T.—Coal-tar Plant.—Barrett Manufacturing Co., Philadelphia, Pa., and other cities, is reported as to establish plant in Oklahoma City for manufacturing coal-tar products of all kinds.

Oklahoma City, O. T.—Cannery.—New State Brewing Co., H. Y. Thompson, president, is planning establishment of cannery, discontinuing the brewery. Portion of plant will be used for cold-storage purposes.

Orange, Texas.—Syrup Mill.—L. H. Shaffer, manager Orange county demonstration farm, will install syrup mill.

Paducah, Ky.—Manufacturing.—Honey Dew Toilet Co. incorporated with \$10,000 capital stock by Mrs. S. W. Hodge, Miss Cornie Grundy, James Campbell and S. B. Caldwell, Jr.

Pine Bluff, Ark.—Cannery.—Jefferson Canning Co. awarded contract to Hastings Industrial Co. of Chicago for erection of cannery; president, J. A. Holmes; vice-president, U. W. Poss; secretary and treasurer, J. E. Boyce.

Quincy, Fla.—Tobacco Factory.—F. H. May Tobacco Co. incorporated with \$15,000 capital stock; F. H. May, president, and O. F. May, secretary.

Quincy, Fla.—Tobacco Factory.—Mitchell-Foshee Tobacco Co. incorporated with capital stock of \$60,000; R. F. Mitchell, president, and T. V. Mitchell, secretary-treasurer.

Quincy, Fla.—Tobacco Factory.—Shaw Tobacco Co. incorporated with capital stock of \$200,000; J. S. Shaw, president; C. R. Shaw, secretary-treasurer.

Salute Genevieve, Mo.—Lime Works.—Nathan-Hicks Hydrated White Lime Co. incorporated with \$40,000 capital stock by L. W. Nathan, H. W. Hicks and Frank Richey.

Saluda, S. C.—Cotton-oil Mill.—B. W. Crouch has purchased the Saluda Oil Mills at \$10,500 and will incorporate company with \$12,000 capital stock to operate the plant.

St. Augustine, Fla.—Boat-building.—S. C. Edminster and P. O. Iwanowski have begun construction of their proposed boat-building plant; machinery will be installed in 40x72-foot building; dry-dock to be 180 feet long.

St. Louis, Mo.—Bakery.—J. Hahn Bakery Co. is having plans prepared by Otto J. Krieg, 3529 South Jefferson avenue, for erection of bakery and stable, 55x140 and 30x42 feet, respectively; paving, vitrified brick and stone; cost \$25,000.

St. Louis, Mo.—Bakery.—John Landbrebe has had plans prepared for erection of bakery and apartment-house; two stories; 50x60 feet; brick, stone and reinforced concrete; cost \$15,000.

St. Louis, Mo.—Brewery.—Anheuser-Busch Brewing Association has had plans prepared by Widmann & Walsh, Wainwright Building, for erection of addition to boiler-house; three stories; 87x102 feet; stone, terra-cotta and reinforced concrete; cost \$30,000.

Tallahassee, Fla.—Tobacco Factory.—Florida Sumatra Leaf Tobacco & Stock Farms incorporated with \$50,000 capital stock; J. Clifford R. Foster, president, and W. A. MacWilliams, secretary-treasurer.

Texarkana, Ark.—Pottery.—Clay Products Co., organized with \$25,000 capital stock to manufacture jugs, jars, vases, etc., and face, fire and vitrified brick, has purchased pottery of John E. Parkhurst and will increase output to four times present capacity; John T. Owsley, president; Ralph G. Moore, vice-president; F. W. Mullins, treasurer, and L. E. Howe, secretary.

Union City, Tenn.—Manufacturing.—Farmers' Union Manufacturing & Storage Co. incorporated by W. M. Fox, J. W. Thompson, W. P. Beard and others.

Vicksburg, Miss.—Candy Factory and Bottling Works.—Biedenharn Candy Co. will erect new building at a cost of about \$15,000 for candy factory and bottling plant.

Wellborn, Fla.—Manufacturing.—Union Manufacturing Co. incorporated with W. L. Rogers, president, and J. F. Carver, secretary.

Winchester, Ky.—Overall Factory.—Winchester Overall Co. incorporated with \$5000 capital stock by S. W. Willis, Jr., O. T. Weaver and W. W. Clark.

ROAD AND STREET IMPROVEMENTS

Blacksburg, Va.—A. J. Miller & Sons, Clinton, Forge, Va., have contract to pave 2550 feet of sidewalk with brick at Blacksburg.

Bristol, Tenn.—Sullivan County Court has appropriated \$5000 for improvement of Bristol-Blountsville and Bristol-Holston valley and Blountsville-Kingsport roads.

Gadsden, Ala.—City has awarded contract to Leslie L. Lockwood, Bessemer, Ala., at \$38,829.06 for 20,000 square yards of cement sidewalk paving and 30,000 linear feet of combined curbing and guttering. (Recently mentioned.)

Greenville, N. C.—City will offer for sale \$25,000 of bonds voted in May for street paving and sewer extension. Address The Mayor. (Previously mentioned.)

Newbern, N. C.—City has voted \$50,000 of bonds for paving streets with concrete and curbing same with granite; C. J. McCarthy, chairman street committee. (Recently mentioned.)

Pensacola, Fla.—City will grade and lay about 170,700 square yards of clay or shale blocks, sheet asphalt, bitulithic, wood block or macadam pavement and 115,350 linear feet of concrete curb. Bids will be opened November 15; L. Hilton Green, chairman board of bond trustees; T. Chalkley Hatton, chief engineer, Wilmington, Del.*

SEWER CONSTRUCTION

Blackshear, Ga.—City contemplates issuing \$50,000 of bonds for construction of sewerage system. Address The Mayor. (Recently mentioned.)

Covington, Ga.—City has voted \$55,000 of bonds for construction of sewer and water systems. J. B. McCrary, Atlanta, Ga., has prepared plans and specifications. (Recently mentioned.)

Greenville, N. C.—City has voted \$25,000 of bonds for sewer extension and paving. Address The Mayor. (Previously mentioned.)

Madison, Ga.—City has voted \$50,000 of bonds for construction of sewer system, etc. Address The Mayor. (Recently mentioned.)

Pleasant Valley, W. Va.—City will vote October 16 on issuance of \$5000 of bonds for construction of sewer system and other improvements. It is proposed to lay about 1600 feet of sewer pipe, ranging from 1 to 20 inches in size. Address The Mayor.

Rock Hill, S. C.—Committee, of which W. J. Roddey is chairman, is considering installation of sewerage system. It is estimated that a system 25 miles in extent will cost about \$117,000.

Sherman, Texas.—City will construct one mile of sewers. Bids will be opened October 21; C. E. Craycroft, Mayor; Henry Zimmerman, City Secretary.*

Smithfield, N. C.—Town Commissioners have appointed N. M. Lawrence, N. B. Grant-ham and E. H. Brooks a committee to investigate cost of constructing sewerage system, water-works and electric-light plant.

Washington, D. C.—District Commissioners awarded contract to Warren F. Brenizer Company, Anacostia, D. C., for construction of sewers in valley of soapstone branch and on Albemarle street at its bid of \$10,356.

TEXTILE MILLS

Denton, N. C.—Denton Cotton Mills Co. incorporated with capital stock of \$100,000 to build 5000-spindle yarn mill. Incorporators: Berry Davidson of Gibsonville, N. C.; J. W. Noel of Lexington, N. C., and J. A. Noel of Roxboro, N. C.

Calhoun, Ga.—Echota Cotton Mills, recently mentioned, has organized with T. W. Harbin president, R. Pitts vice-president and O. N. Starr treasurer; capital stock is \$100,000; site for mill secured; other details being considered.

Clearwater, S. C.—Seminole Manufacturing Co. will soon complete installation of its 20,000 spindles and 512 looms, in accordance with plans previously detailed; will manufacture fine drills and wide sheeting, using print-cloth numbers; Thomas Barrett, Jr., president, Augusta, Ga.; M. H. Hendee, manager, Clearwater; Wm. McKinley, Jr., agent, 105 Worth street, New York. (Organization, plans and full particulars reported heretofore.)

Clinton, S. C.—D. M. Patrick, H. A. Grady and L. A. Bethune are interested in plans for forming company to build cotton mill.

East Monbo (not a postoffice), N. C.—Turner Mills Co. will operate its cotton-yarn mill by water-power direct; will use steam for heating and electricity for lighting. Its contract (recently noted) to S. S. Ordway &

Sons of Winston-Salem, N. C., includes construction of dam, wheel pit and concrete foundation for mill building. Textile equipment to be 6000 spindles at first and later increased to 10,000. Other details previously reported; C. H. Lester, superintendent of construction and engineer in charge at East Monbo, postoffice at Monbo, N. C. Address company, care of W. D. Turner, president, Box 175, Statesville, N. C.

Fayetteville, N. C.—Victory Manufacturing Co. will build, it is reported, another print-cloth mill in 1908; present mill has 12,000 spindles and 400 looms.

Fearington (postoffice at Durham), N. C.—Fred Williams and associates will organize company to build hosiery-knitting mill.

Randleman, N. C.—Company will be organized with J. H. Mills, president, and W. N. Elder, secretary-treasurer, to build cotton-yarn mill of 5000 spindles; capital stock \$100,000.

Shelby, N. C.—Elia Manufacturing Co. awarded contract to Alee & Edwards of Hickory, N. C., for construction of mill building one-story high, 77x356 feet, with concrete floor. Contract for machinery has been awarded. This and other details recently fully noted. Plant will have 5000 spindles and 126 looms.

Simpsonville, S. C.—Edward F. Woodside of Pelzer, S. C., will organize company with capital stock of \$200,000 to build cotton mill at Simpsonville.

Uniontown, Ala.—Ellawhite Cotton Mills is reported as contemplating the erection of additional mill; present equipment, 10,000 spindles.

Tarboro, N. C.—Wah Ree Hosiery Mills is reported as to install knitting machinery to increase present daily capacity from 500 to 1000 dozen pairs.

Trinity, N. C.—W. N. Elder and associates will establish knitting mill.

WATER-WORKS

Altus, O. T.—City has called an election to vote November 5 on issuance of bonds for \$50,000 to construct water-works; plan contemplates building of surface reservoir with capacity for 232,000 gallons and construction of standpipe. Address The Mayor.

Baltimore, Md.—Municipal Fire Board, Edward M. Parrish, president, has requested Board of Estimates for appropriation of \$445,000 for establishment of high-pressure pipe line through the business section of the city.

Bay City, Texas.—J. W. Maxey, Houston, Texas, will prepare plans and specifications and superintend construction of proposed water-works, for which \$18,000 of bonds were recently reported voted. City will furnish supplies and labor; pump, engine and standpipe contract will be let separately; gasoline power will be used and wooden wire-wrapped pipe will be laid.

Covington, Ga.—City has voted \$55,000 of bonds to construct water and sewer systems. J. B. Cray, Atlanta, Ga., has prepared plans and specifications. (Recently mentioned.)

Fairview, O. T.—City will install water-works system at cost of about \$50,000; C. E. Dunham, clerk; D. R. Thomas, chairman City Council. (Recent notice of \$25,000 bonds voted is incorrect; amount was \$50,000.)

Louisville, Miss.—Louisville Light & Water Co. incorporated by W. A. Strong and others. (See item under "Electric Light and Power.")

Madison, Ga.—City has voted \$50,000 for construction of water-works, etc. Address The Mayor. (Recently mentioned.)

Meridian, Miss.—Meridian Water-Works Co. will expend \$50,000 in extension of pipes of water-works system; W. F. Wilcox, superintendent. (Vote on bonds recently mentioned.)

Nashville, Tenn.—City has voted \$200,000 of bonds for extension of water mains; T. O. Morris, Mayor. (Previously mentioned.)

Prague, O. T.—City will vote October 21 on issuance of \$30,000 of bonds for construction of water-works. Address The Mayor.

Smithfield, N. C.—Town Commissioners have appointed N. M. Lawrence, N. B. Grant-ham and E. H. Brooks a committee to investigate cost of constructing water-works, sewerage system and electric-light plant.

Stillwater, O. T.—Reported city will vote on issuance of \$60,000 of bonds for water-works extension. Address The Mayor.

WOODWORKING PLANTS

Augusta, Ark.—Wapakoneta (Ohio) Wheel Co. will establish plant in Augusta for manufacturing wagon spokes, rims, felloes and hubs; Edward Frau, local manager.

Chapel Hill, N. C.—A. E. Lewis, Liberty, N. C., is reported as contemplating establishment of woodworking plant at Chapel Hill.

Chattanooga, Tenn.—Reported that E. J. Noblett of Chicago, Ill., will establish in Chattanooga a plant for manufacturing kitchen cabinets and other wood products.

Chattanooga, Tenn.—Chattanooga Wheelbarrow & Truck Co. incorporated with \$50,000 capital stock by Z. W. Wheland, C. H. Houston, W. M. Fowler and others.

Galax, Va.—Galax Furniture & Lumber Co., S. E. Wilkinson, president, will rebuild plant recently burned; two-story building, 60x150 feet, iron-clad, will be erected; cost of building, \$4000; cost of machinery, \$9000; product, dressers and chiffoniers.*

Huntington, W. Va.—Probst Furniture Co. incorporated with \$75,000 capital stock by Mary A. Simms and Paul W. Scott, both of Huntington; Lewis W. Probst, Charles W. McKnight and George L. Probst, all of Pomeroy, Ohio.

Lufkin, Texas.—Committee has been appointed consisting of W. M. Glenn, D. A. Singleton and C. L. Shless to promote establishment of furniture factory. About \$20,000 will be invested.

Mobile, Ala.—Bacon-Underwood Veneer Co. has increased capital stock from \$40,000 to \$60,000.

Nashville, Tenn.—Dixie Mantel & Manufacturing Co. incorporated with capital stock of \$15,000 by D. J. Doig, James Richey, C. H. Brakebill, Sam Everett and others (all probably of Nashville).

Newport, Ark.—D. B. Morrison and N. B. Roob, representing the Independent Powder Co., Joplin, Mo., have submitted proposition for establishment of box factory at Newport.

Wartrace, Tenn.—Wartrace Lumber & Manufacturing Co. will establish plant for the production of rough and dressed lumber; will make specialty of manufacturing buggy gear, stock, reaches, cross-bars, neck yokes, singletrees and spokes; machinery purchased; frame building, with iron sides, 100x50 feet, will be erected; cost of building, \$1000; cost of machinery, \$4000; architect and engineer, Locke Clayton.

Wilmington, N. C.—Hannah Box Shook Co. will rebuild plant lately destroyed by fire at a loss of \$60,000.

BURNED

Barado, Texas.—Gossage & Son's sawmill. Bay City, Texas.—Plotner & Stoddard's warehouse at Buckeye, Texas; loss \$35,000.

June, Tenn.—John Holmes & Son's grist, saw and stave mills; loss \$2500.

Kingsdale, N. C.—Kingsdale Turpentine Co.'s plant; loss \$10,000.

Kingsland, Ark.—E. R. Buster's two warehouses; loss \$30,000.

Lamar, Ark.—W. A. Cazor's cotton gin and mill; loss \$4000.

Marietta, Ga.—Georgia Manufacturing Public Service Co.'s paper mill damaged by explosion; loss \$10,000.

Millersburg, Ky.—Millersburg Female College; loss \$25,000; Rev. C. C. Fisher, superintendent.

Okeene, O. T.—T. M. Connolly & Co.'s elevator.

Parkersburg, W. Va.—Charles Kane's boiler works.

Rockport, Texas.—Rockport Hotel, Dr. J. W. Davidson, proprietor.

Stantonville, Tenn.—Cotton gin owned by F. P. Platt and William Davis; loss \$2000.

Walters, Miss.—Box factory of Anderson & Tully, Memphis, Tenn., W. J. Sheppard, superintendent.

Waverly Hall, Ga.—H. W. Trullitt's sawmill; loss \$9000.

Wilmington, N. C.—Hannah Box Shook Co.'s plant; loss \$75,000.

BUILDING NOTES

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

APARTMENT-HOUSES

Clayton, Mo.—Edward Oncker has had plans prepared by Leonard Haeger for erection of apartment-house; two stories, 40x50 feet; reinforced concrete, brick, stone and terra-cotta; cost \$15,000.

Dallas, Texas.—Alexander Camp is reported as planning the erection of several apartment-houses of modern design and construction.

Kansas City, Mo.—C. B. Striegel is having plans prepared by J. G. Braecklein, Gibraltar Building, for erection of store and apartment-house; two stories; 35x50 feet; cost \$7000.

St. Louis, Mo.—Sidney Schiele will erect apartment-house; three stories; 61x200 feet; brick, stone and terra-cotta; cost \$30,000.

St. Louis, Mo.—E. L. Wagner Construction Co., Victoria Building, has contract to erect store and apartment building for J. A. Kraeuchi after plans by J. D. Paulus, Laclede Building. Structure will be two stories; brick and stone; cost \$15,000.

St. Louis, Mo.—L. Blumenkrans has had plans prepared by N. V. Leahy for remodeling store and flat building into 12 stores; brick and concrete; cost \$15,000.

St. Louis, Mo.—J. H. Long has had plans prepared for erection of apartment-house; three stories; brick, reinforced concrete, etc.; cost \$50,000.

St. Louis, Mo.—Tacke & Kirschbaum have had plans prepared for erection of six apartment-houses; two stories; brick and stone; cost \$30,000.

St. Louis, Mo.—E. J. Hess has prepared plans for two apartment-houses for himself; structures to be two stories, 25x47 feet; cost \$10,000.

St. Louis, Mo.—A. B. Corwin is preparing plans for erection of apartment-house; two stories, 60x130 feet; brick and stone; cost \$23,000.

St. Louis, Mo.—Shisler-Bidwell Building Co. is having plans prepared by Charles H. Deitering, Missouri Trust Building, for erection of apartment-house; four stories, 230x74 feet; cost \$200,000.

CHURCHES

Albemarle, N. C.—Methodist congregation contemplates erecting edifice. Address The Pastor, Methodist Church.

Albemarle, N. C.—Lutheran congregation will erect brick edifice at a cost of \$15,000. Address The Pastor, Lutheran Church.

Brookside, Ala.—Contractors are invited to submit bids for erection of cement-block slate-roof church. Address Box 14, Brookside.

Chattanooga, Tenn.—First Presbyterian Church has had plans prepared by Bearden & Foreman, Chamberlain Building, for erection of edifice; floor space, 18,000 square feet, divided into main auditorium and Sunday-school room; stone steps 44 feet wide, between six classic columns three and one-half feet in diameter and 2 feet high, supporting a pediment 52 feet wide, apex of which is 50 feet from ground; ceiling of auditorium 50 feet high; seating capacity 800; gallery, seating capacity 200; floor to be foundation made of reinforced concrete, over which an oak floor will be laid; Dr. Bachman, pastor.

Elberton, Ga.—The Presbyterians contemplate building another and larger edifice. Address The Pastor of Presbyterian Church.

Lynchburg, Va.—First Baptist congregation has had plans prepared by E. G. Frye for erection of parsonage 44x45 feet; two stories with basement; colonial style; gray brick; white trimmings; slate roof; heating plant.

Napoleonville, La.—Catholic Church congregation will erect edifice recently mentioned; 115x64 feet; cost \$75,000; plans by L. H. L'Anglais.

St. Louis, Mo.—St. John's Episcopal congregation has had plans revised by William A. Lucas, Odd Fellows' Building, for erection of edifice; 68x115 feet; brick and stone; cost \$30,000.

St. Louis, Mo.—Lutheran congregation will erect edifice 84x100 feet; brick, stone and terra-cotta; cost \$20,000; plans by the Foell Architectural Co.

COURTHOUSES

Cairo, Ga.—Grady County Commissioners will levy tax for erection of courthouse, bonds having been voted adversely. Construction contract will be awarded January 1, 1908.

Clarendon, Ark.—Monroe county has appropriated \$50,000 for erection of courthouse. Address County Commissioners.

Leesville, La.—Police Jury, C. K. Oakes, clerk, will open bids November 4 for erection of courthouse; certified check, \$2900; bids to be made as follows: No. 1—For construction of building as per plans and specifications. No. 2—Stating how much is to be added to bid No. 1 in case piling for foundation is put in. No. 3—For electric wiring. No. 4—For heating and plumbing. Contractors may bid on building complete, including heating, plumbing and electric wiring, but must itemize bid as above stated; plans and specifications on file at office of C. H. Page, Jr., &

Bro., architects, Austin and Houston, Texas; also with Mr. Oakes at courthouse, Leesville. Plans may be obtained from C. H. Page & Bro., architects, Austin, Texas.

Paris, Ark.—Logan county is considering erection of courthouse costing about \$50,000. Address County Commissioners.

DWELLINGS

Ardmore, I. T.—C. M. Campbell contemplates erecting dwelling costing \$3000.

Anniston, Ala.—Dr. A. N. Steele is having plans prepared for erection of residence; two stories; eight rooms; cost \$10,000.

Baltimore, Md.—Albert G. Fehsenfeld, 702 Keyser Building, will erect modern dwelling on lot 100x300 feet on Charles-Street avenue near Merryman's lane.

Baltimore, Md.—Kenilworth Park Co. incorporated with a capital stock of \$10,000 to develop for residential purposes 50 acres of land at Govanstown (near Baltimore) and erection of a number of dwellings by Isaac H. Moss, president, York road near Woodbourne avenue; Jacob S. Parr, vice-president, York road near Homeland avenue; Frederick G. Burger, treasurer, and Harry E. Parkhurst, secretary.

Bennettsville, S. C.—H. K. Covington will build dwelling; two and one-half stories, 64x96 feet; concrete blocks and terra-cotta; gas and electric fixtures; mantels, etc.; cost \$30,000; architect, D. G. Zeigler of Columbia, S. C.

Charlotte, N. C.—Renwick Wilkes will erect residence.

Chattanooga, Tenn.—J. J. Sullivan has received permit for erection of two-story brick dwelling and store, to cost \$5000; contractors, Adams & Schneider.

Citronelle, Ala.—A. Herbel has had plans prepared by E. H. Herbel, Hotel Citronelle, for erection of residence; two stories, 40x48 feet; frame and concrete blocks.

Creve Coeur, Mo.—J. A. Mareau has contract to erect frame residence 44x50 feet in St. Louis county for Dr. J. D. Paster; cost \$10,000; plans by W. A. Cann, Missouri Trust Building, St. Louis, Mo.

Cumberland, Va.—B. W. Moore, Chase City, Va., has contract to erect residence at Cumberland.

Fort Smith, Ark.—F. M. Blaisdell, Illinois Building, is preparing plans for several residences.

Greensboro, N. C.—R. L. Walker, Milton, N. C., will erect residence in Greensboro.

Italy, Texas.—S. M. Dunlap will open bids October 15 for erection of two-story 10-room brick-veneer residence. Plans and specifications on file in office of Mr. Dunlap at Italy and of J. S. Moad, architect, North Texas Building, Dallas, Texas; certified check, \$250, payable to order of Mr. Dunlap; usual rights reserved.

Kansas City, Mo.—W. A. Hinchman is having plans prepared by John W. McKecknie, New York Life Building, for erection of residence; two stories, 30x46 feet; cost \$15,000.

Mt. Airy, N. C.—J. F. Norman will build dwelling.

Nashville, Tenn.—W. J. Cummins, Cummins Station, Nashville, has not selected architect and contractor for residence (recently mentioned) to be erected at cost of \$30,000 to \$40,000; 10 rooms or more; hot-water heating; electric and gas lighting; 200-feet front.

Newberry, S. C.—Mrs. A. C. Shumpard will build residence after plans by D. G. Zeigler of Columbia, S. C.; concrete blocks; marble work; composition roofing; electric lighting fixtures; plate glass; cost \$7000.

New Decatur, Ala.—John Knight has awarded contract to George Ross for erection of residence.

Oklahoma City, O. T.—Mrs. Ida P. Miller will erect residence costing between \$5000 and \$10,000.

Oklahoma City, O. T.—A. J. Volz will erect residence costing between \$5000 and \$10,000.

Oklahoma City, O. T.—Frank Johnson will erect residence costing between \$5000 and \$10,000.

Oklahoma City, O. T.—W. R. Payne will erect residence; ground floor 40 feet square; brick; cost \$15,000.

Oklahoma City, O. T.—R. A. Vose is having plans prepared by J. W. Hawk for erection of residence; concrete; Spanish mission style of architecture; cost \$20,000.

Portsmouth, Va.—Winston Parrish awarded contract to J. N. Harris, Port Norfolk, Va., for erection of two frame double tenements 32x70 feet; ordinary construction; gas lighting; cost \$4400.

Richmond, Va.—C. W. and J. Lee Davis will erect 10 eight-room dwellings to cost

\$40,000; construction by owners; Latrobe stoves to be used for heating. (Recently mentioned as apartments.)

Richmond, Texas.—J. E. Winston will erect two-story residence.

Richmond, Va.—Thomas L. Boyle has permit to erect three detached frame dwellings; cost \$5700; J. T. J. Melton, contractor.

Sapulpa, I. T.—Robert Glenn contemplates erecting \$10,000 residence.

St. Albans, W. Va.—L. G. Wilden awarded contract to Mark Blake for erection of 10-room frame dwelling; gas or electric lighting; cost \$4000. Address, Box 263.

St. Louis, Mo.—E. Priesler is preparing plans for erection of two residences; 31x26 feet; brick and stone; cost \$15,000.

St. Louis, Mo.—O. R. S. Traber is preparing plans for erection of residence in St. Louis county; 35x49 feet; frame; cost \$10,000.

St. Louis, Mo.—Charles A. Stockstrom has had plans prepared by E. C. Janssen, Chemical Building, for erection of residence at Compton Heights; brick, stone and terra-cotta; cost \$30,000.

St. Louis, Mo.—B. J. Charleville has contract to erect brick and stone residence at a cost of \$26,000 for Mrs. A. V. Forry after plans by Leonhard Haeger.

St. Louis, Mo.—William Sutherland & Co. have contract to erect brick residence, 35x45 feet, in St. Louis county for J. T. Keller after plans by Drischler & Elsner, Walwright Building; cost \$20,000.

St. Louis, Mo.—William H. Gruen will prepare plans for residence in St. Louis county; frame; cost \$10,000.

St. Louis, Mo.—J. T. Hurley has had plans prepared by J. S. Lee for erection of residence; 35x45 feet; brick, stone and terra-cotta; cost \$12,000.

St. Louis, Mo.—Herman Mauch will erect brick and stone residence at a cost of \$30,000 at Compton Hill Park after plans by J. L. Wees, Commercial Building.

St. Louis, Mo.—F. Gear will erect three two-story dwellings at a cost of \$12,900.

HOTELS

Buena Vista Springs (not a postoffice), Tenn.—Reported that a syndicate contemplates building \$100,000 hotel at Buena Vista Springs. James L. Glass (general manager Wonderland Park Co.), Toledo, Ohio, can give information.

Fayetteville, N. C.—Hotel Lafayette Co. organized with C. Gresham, Charlotte, N. C., president, and C. J. Cooper of Fayetteville, secretary-treasurer.

Kenwood Springs (not a postoffice), Mo.—H. G. C. Luytjes, St. Louis, Mo., will erect hotel at Kenwood Springs; frame and brick; cost \$100,000; plans by A. F. Haussier, 510 Pine street, St. Louis, Mo.

San Antonio, Texas.—San Antonio Hotel Co. awarded contract to Westlake Construction Co., St. Louis, Mo., for erection of eight-story hotel after plans by Mauran, Russell & Garden, St. Louis, Mo.; fireproof; steam (direct radiation) heat; electric lighting; electric elevators; cost \$60,000.

San Antonio, Texas.—Hot Wells Hotel Co., I. M. Putnam, president, will build an L extension containing 90 rooms to main building of the Hot Wells Hotel and provide another dining-room, making a total of 190 rooms. About \$100,000 will be expended in improvements. F. M. Swearingen is lessee.

Summit, Miss.—Dr. V. Simmons of Summit, S. J. Harper and W. W. Bradshaw, Hattiesburg, Miss., will probably erect hotel and construct lake.

Tampa, Fla.—Josiah Richardson is having plans prepared by Bonfoey & Elliott, Curry Building, for erection of hotel; 30x100 feet; buff brick and concrete; cost \$20,000.

MISCELLANEOUS STRUCTURES

Anadarko, O. T.—Business Building.—Mr. Meeting, architect, is preparing plans for erection of business building; pressed brick and sandstone; cost \$15,000.

Atlanta, Ga.—Alms-house.—Fulton County Commissioners will have plans drawn about December for \$50,000 brick almshouse recently noted to be erected; work on construction to be done by county convicts; H. M. Wood, clerk.

Baltimore, Md.—Stable.—O. B. Schler & Bro., proprietors Hygeia Dairy, 2701-2711 Mt. Vernon avenue, have awarded contract to J. H. Walsh & Bro., 321 Clay street, for reconstruction of three-story brick stable 30x75 feet, recently reported as having been damaged by fire; cost of improvements, \$5000.

Baltimore, Md.—Library.—Medical and Chirurgical Faculty of Maryland, 847 Hamilton terrace, will erect new fireproof library

building to cost about \$100,000. Dr. A. P. Herring, 1317 Madison avenue, is chairman of committee in charge.

Baltimore, Md.—Hospital.—Wyatt & Nolt, architects, Keyser Building, Calvert and German streets, will shortly take bids on construction of children's hospital on the grounds of the Johns Hopkins Hospital by the trustees of the Harriet Lane Johnston estate; three stories; 204-foot front with wings on either side 117 feet long; reinforced concrete construction; modern conveniences; cost about \$250,000.

Brunson, S. C.—Store Building.—E. W. Adderson will build store building; 30x100 feet; concrete blocks and terra-cotta; to cost \$6000; architect, D. G. Zeigler of Columbia, S. C.

Calro, Ga.—Jail.—Grady County Commissioners will levy tax for erection of jail, bonds having been voted adversely.

Charlottesville, Va.—Sanitarium.—Oak Hill Sanitarium Co. incorporated with \$15,000 capital stock; R. L. Robertson, president, and W. J. Keller, secretary-treasurer.

Chattanooga, Tenn.—Y. M. C. A. Building.—Young Men's Christian Association will open bids about December 1 for erection of building recently mentioned; five stories; 100x120 feet; semi-fireproof; gas and electric lighting; cost, \$100,000 or more; T. L. McGill, secretary; plans by R. H. Hunt. (Mentioned recently.)

Columbia, S. C.—Automobile Garage.—E. A. Jenkins, Sumter, S. C., is reported as having had plans prepared by Shand & Lafaye, 1238 Main street, for erection of automobile garage; concrete, stone and brick; two stories; 52x100 feet; C. B. Simmons, local agent.

Cumberland, Md.—Roundhouse.—Baltimore & Ohio Railroad, D. D. Carothers, chief engineer, Baltimore, Md., will erect brick 60-stall roundhouse, coal tipple and sandhouse at Cumberland. It is proposed to convert old roundhouse into repair and machine shop.

Franklin, W. Va.—Jail.—W. M. Boggs, president county court of Pendleton county, will open bids November 25 for erection of brick jail and jailor's residence combined, to be completed about January 1, 1909. Plans and specifications on file in office of County Clerk. For further information address Mr. Boggs.

Hamlin, Texas.—Business Building.—J. T. Wofford & Sons will erect two-story brick business building at cost of \$5000; 75x140 feet; W. E. Raney and C. D. Hart, architects and contractors.

Harriman, Tenn.—Business Building.—G. W. Carson & Bros. of Onelda, Tenn., will erect three-story brick building; press-brick front; stone trimmings; gravel roof; concrete floor in basement; 75x120 feet; probable steam heat; electric lighting; elevator; approximate cost, \$25,000; contract not let; owners and employees may do the work themselves; architect, W. A. Geasland, Rockwood, Tenn. (Recently mentioned.)

Jackson, Miss.—Store Building.—Heidelberg Bros., Hattiesburg, Miss., will erect store building in Jackson.

Kansas City, Mo.—Stable.—R. A. Long has permit for erection of stable to cost \$40,000; architects, Howe & Hoyt.

Kansas City, Mo.—Music Hall.—J. Oliver Hogg, New York Life Building, is preparing plans for music hall; six stories; brick, stone and steel; cost \$300,000.

Kansas City, Mo.—Business and Lodge Building.—Swedish Society will erect business and lodge building; three stories; 47x117 feet; cost \$20,000; Carl Nilson, Kemper Building, contractor; C. B. Sloan, Hall Building, architect.

Lenoir, N. C.—Lenoir Hardware & Furniture Co. will erect three-story brick business building to be used for hardware, furniture and undertakers' goods and for bank; 68x119 feet; two glass fronts, one 68 feet, one 70 feet; also pressed-brick fronts; character of heating undecided; electric lighting; hand elevator; cost \$17,000; owners invite bids on any material to be used in erection of building; plans and specifications may be obtained from architects, Hook & Rogers, Charlotte, N. C.; bids for erection to be opened November 1.

Little Rock, Ark.—Gallery.—St. Louis, Iron Mountain & Southern Railroad has had plans prepared by T. C. Link, Carleton Building, St. Louis, Mo., for erection of gallery to railroad station; 35x226 feet; brick, stone and terra-cotta; cost \$20,000.

Luverne, Ala.—Jail.—Crenshaw county's proposed jail will be of fireproof construction, with hot-air heating and electric lighting; cost \$12,000; architect, E. J. Ostling, Montgomery, Ala. As recently noted, bids will be opened November 6.

Mandeville, La.—Store Building.—A. Depre has awarded contract to Thomas Engelhart, New Orleans, La., for erection of store building to replace burned structure; new building will be one story; concrete; marble front; 35x40 feet.

Mena, Ark.—Jail.—Sevier county has awarded contract to Lon Goff for erection of proposed jail to cost \$12,000; concrete construction.

National Soldiers' Home, Va.—Greenhouse. Sealed proposals will be received at office of treasurer, Southern Branch, N. H. D. V. S., until November 7 for furnishing all material and labor for constructing a greenhouse, in accordance with instructions and specifications, copies of which, with blank proposals and other information, may be had upon application to John T. Hume, treasurer.

Newberry, S. C.—Store Building.—H. W. Whitaker will build store structure; concrete blocks and terra-cotta; gas and electric lighting fixtures; plate-glass fronts; composition roofing; cost \$6800; architect, D. G. Zeigler of Columbia, S. C.

New Orleans, La.—Sealed proposals in duplicate will be received at headquarters Marine Corps, Quartermaster's office, Washington, D. C., until November 5 for construction at naval station, New Orleans, La., of marine barracks and officers' quarters. Proposal blanks, plans and specifications may be obtained at this office or from DePuy, Churchill & LaBouisse, architects, 817 Hibernia Bank Building, New Orleans, La.; F. L. Denny, Colonel, Quartermaster, U. S. Marine Corps.

Oklahoma City, O. T.—Store Building.—T. P. Mellon will erect additional story to store building; brick; cost \$10,000.

Radford, Va.—Business Building.—Jordan Hardware Co. awarded contract to Central Lumber Co. for erection of business building recently mentioned; plans by W. J. Kenderline; two stories; 40x60 feet; steam heat; electric lighting; cost \$4530.

San Antonio, Texas.—Business Building.—Joske Bros. are having plans prepared by L. M. J. Diekmann for erection of three additional stories and remodeling of building.

St. Louis, Mo.—Mercantile Building.—John T. Nolde, 916 Olive street, will award contract November 15 for remodeling building mentioned in September; plans by Matthews & Clark, Missouri Trust Building; five stories and basement, 82x100 feet; steam heat; electric and gas lighting; passenger and freight elevators; cost of remodeling, \$20,000.

Swainsboro, Ga.—Swainsboro Lodge, Knights of Pythias, will erect building. Building committee, composed of Arthur Mason, George Rentz and W. H. Proctor, has submitted plans for a two-story structure, costing about \$7000.

Williamsport, Md.—Lodge Building.—Knights of Pythias has engaged J. W. Woltz of Waynesboro, Pa., to prepare plan for lodge building; three stories high; 40x30 feet; stores on ground floor; opera-house on second; lodgerooms on third; to cost \$12,000.

MUNICIPAL BUILDINGS

Elizabeth City, N. C.—City Hall, Market, Fire Department, etc.—City will erect public building, to include city hall, market, fire department headquarters and auditorium; plans not made; site of building not positively decided; approximate cost \$40,000; electric lighting; C. E. Thompson, Mayor.

Fayetteville, N. C.—Market-house, etc.—Market and opera house will be erected; plans prepared by Wheeler, Runge & Dickey, Charlotte, N. C.; bids received until October 22. Address J. G. Hollingsworth.

Louisville, Ky.—Station-house.—Board of Public Works has awarded contract to George A. Seabler at \$3863 for erection of station-house for Seventh district; to Simon Shulafer for plumbing work, and to F. A. Clegg & Co. for heating plant; total cost, \$10,415.50.

Wichita Falls, Texas.—City Hall and Jail.—City has had plans prepared by Carl Boller, Kansas City, Mo., for erection of proposed city hall and jail; two stories; brick and stone; 110x147½ feet; mill construction; steam heat; electric lighting; cost \$12,000. (Recently mentioned.) T. B. Noble, Mayor.

OFFICE BUILDINGS

Anadarko, O. T.—Hite Bros. have had plans prepared for erection of bank building costing \$8000.

Covington, Ga.—Farmers & Merchants' Bank, Dr. N. Anderson, president, will erect bank building.

Hartwell, Ga.—Masonic Lodge will erect store, office and lodge building; brick; glass, iron and stone front; three stories; cost

about \$10,000. Address Secretary of Masonic Lodge.

Holly Hill, S. C.—Bank of Holly Hill will erect office building; two stories, 30x60 feet; press brick and terra-cotta; stone trimmings; fireproofing; composition roofing; electric-lighting fixtures; plate glass; cost \$4000; architect, D. G. Zeigler, Columbia, S. C.

Knoxville, Tenn.—B. H. Sprinkle will erect four-story office building 45x83 feet, to contain storerooms and offices; ordinary construction; steam heat; electric and gas lighting; hand-power elevator from basement to first floor; cost of building \$12,000; plans by Baumann Bros.; construction work to be done by owner.*

Lenoir, N. C.—Lenoir Hardware & Furniture Co. will erect business building 68x119 feet, to contain bank, stores and offices. (For description see item under "Miscellaneous Structures.") (Mentioned recently.)

Mandeville, La.—St. Tammany Bank & Trust Co. awarded contract to Thomas Engelhart of New Orleans, La., for erection of proposed office building. (Previously noted.)

Oliver Springs, Tenn.—Bank Building.—Oliver Springs Banking Co. will erect two-story bank and office building at cost of about \$5000; W. A. Geasland, Rockwood, Tenn., architect and contractor; brick; 22x70 feet; press-brick front; marble trimmings; electric lighting; offices on second floor.

Paducah, Ky.—Dr. D. G. Murrell will erect two-story brick store and office building after plans by A. L. Lassiter. Contract has been awarded.

Shawnee, O. T.—C. C. Pritchard is having plans prepared for erection of office building to cost \$12,500.

South McAlester, I. T.—William Busby will erect office building; brick and concrete; stone and terra-cotta trimmings; 25x72 feet; two stories; cost \$15,000.

St. Louis, Mo.—Sussex Realty Co. will erect store and office building; five stories, 40x100 feet; cost \$50,000; plans by Milligan & Wray, Chemical Building.

St. Louis, Mo.—West Lake Construction Co. has contract to remodel brick bank building for the Mechanics' American Bank after plans by A. B. Groves, Stock Exchange Building; cost \$10,000.

St. Louis, Mo.—Silburn Realty Co. has had plans prepared by Mauran, Russell & Garden, Chemical Building, for erection of store and office building; 18 stories, 86x127 feet; brick, stone, reinforced concrete, terra-cotta, etc.; cost \$700,000.

Temple, Texas.—City National Bank is having plans prepared for erection of four or five-story office building costing about \$75,000.

Wellsville, Mo.—Wellsville Commercial Bank will erect bank and office building; two stories, 30x60 feet; cost \$100,000; plans by Jos. Stauder & Sons.

RAILWAY STATIONS

Somerset, Ky.—Cincinnati, New Orleans & Texas Pacific Railway, H. E. Warrington, chief engineer, Cincinnati, Ohio, is reported to erect depot at Somerset at a cost of \$100,000 and convert old depot into railroad Y. M. C. A.

St. Louis, Mo.—McKinley System Electric Railroad will erect passenger station; one story; brick, stone and reinforced concrete; cost \$40,000. Plans by R. D. Smith, Bank of Commerce Building.

SCHOOLS

Alpine, Texas.—J. D. Jackson will open bids December 10 for erection of two-story school building. Structure to be of brick, stone or concrete blocks, and separate proposals are solicited. Plans and specifications on file at office of H. T. Phelps, San Antonio, Texas, and of E. F. Higgins, Alpine; certified check, \$500; usual rights reserved.

Auburn, Ala.—Alabama Polytechnic Institute has adopted plans by N. C. Curtis, professor of architecture, for erection of Carnegie Library; brick; two stories; capacity, about 50,000 volumes; cost \$30,000. (Recently mentioned.)

Cedar Hill, Texas.—Cedar Hill Independent School Board awarded contract to A. L. Cornelius, Dallas, Texas, for erection of school building recently mentioned; plans by J. S. Moad, Dallas, Texas; brick; eight rooms; cost \$10,000.

Centerville, Ala.—City has voted bonds for erection of school building. Address The Mayor.

Chattanooga, Tenn.—School building recently mentioned, contract for which was awarded to J. T. Horner, 701 Glass street, East Chattanooga, will be two stories and basement; 58x100 feet; assembly-room 56x56

feet; classrooms; hot-air heating; electric lighting; plans by R. H. Hunt; cost of completed building, \$18,000.

Clinton, O. T.—City has voted \$11,000 of bonds for erection of school building. Address The Mayor.

College Station, Texas.—Bids will be opened by Dr. H. H. Harrington, president A. & M. College, October 16 for erection of dormitory, bathhouse and veterinary hospital to be built at College Station according to plans and specifications on file at College Station and in office of Smith & Schenk, architects, Fort Worth, Texas; usual rights reserved.

Covington, Ga.—City has voted \$500 for erection of annex to school building. Address The Mayor.

Dermott, Ark.—Bids will be opened October 30 for erection of school building. Plans and specifications can be seen upon application to Charles L. Thompson, Little Rock, Ark., architect, or to Dr. E. E. Barlow of Dermott, to whom all bids must be addressed; certified check, 5 per cent. of amount of bid. Separate bids will be received on plumbing, heating and wiring; R. E. Buckner, president of board.

Franklin, La.—Bids will be opened October 29 for erection of three-story brick school building; certified check \$500, payable to Wilson McKerrall, chairman building committee; plans and specifications on file at office of Mr. McKerrall, president St. Mary's Bank & Trust Co., at Franklin, or of C. H. Page, Jr., & Bro., architects, Austin and Houston, Texas. Usual rights reserved. Bids to be made as follows: No. 1 for construction of building; No. 2 for what additional cost it will be to make width of concrete one foot wider where width of four feet is shown on plans, thus making it five feet in width; No. 3 for additional cost to put metal ceiling throughout entire first and second floors, basing cost of metal ceiling on \$7.50 per square f. o. b. factory; No. 4 for plumbing, electric wiring and heating.

Handley, Texas.—City will vote November 2 on issuance of \$15,000 of bonds to erect school building. Address The Mayor.

Huntington, W. Va.—School Board, J. K. Oney, clerk, is having plans prepared by J. B. Stewart for erection of addition to the Douglass school; brick; cost \$10,000.

Kingstree, S. C.—Public-school building, contract for which was recently noted awarded to W. R. Grimes, will be erected at cost of \$12,000; plans by E. V. Richards, Bennettsville, S. C.; two-story building; 43x83 feet.

Lenoir City, Tenn.—City will open bids October 22 for erection of school building. Plans and specifications can be obtained from John F. Eason of building committee or from Baumann Bros., architects, Knoxville, Tenn.; usual rights reserved.

Martinsburg, W. Va.—School Board, A. T. Russler, president, will have plans prepared by J. B. Stewart, Huntington, W. Va., for erection of school building; two stories; brick; cost \$40,000.

Memphis, Tenn.—McKnight & Barker are lowest bidders at \$125,472 for erection of two school buildings. Action on all bids has been postponed to next meeting of Council.

Rutledge, Ga.—City will vote October 30 on issuance of \$10,000 of bonds for erection of school building. Address The Mayor.

THEATERS

De Queen, Ark.—Cannon & Pearre Building, recently mentioned, will be two stories; 50x100 feet; opera-house on second floor; lower story for printing plant; brick construction; heating not decided; electric lighting; cost \$7500; architect, G. H. Cravens; contractor, J. T. McClanahan.

Fayetteville, N. C.—Market and opera-house will be erected; bids received until October 22; plans by Wheeler, Runge & Dickey, Charlotte, N. C.; address J. G. Hollingsworth.

Gadsden, Ala.—Hayden-Pake Theater Co. organized with \$40,000 capital stock to erect two-story theater 75x125 feet; L. L. Herzberg, president; O. R. Hood, vice-president, both of Gadsden, and H. B. Pake, Demopolis, Ala., treasurer.

Hamlet, N. C.—T. F. Boyd is having plans prepared by H. E. Bonitz, I. O. O. F. Building, Wilmington, N. C., for erection of building recently mentioned; brick; 92x125 feet; to contain opera-house, stores and banquet hall; steam or hot-water heating; electric lighting; small elevator; cost \$30,000 to \$25,000; bids to be opened about January 1.

Lenoir, N. C.—Lenoir Opera-House Co. incorporated with \$10,000 capital stock by David J. Craig, C. V. Henkel and L. P. Henkel.

St. Louis, Mo.—Stephens & Pearson, Missouri Trust Building, are preparing plans for theater; two stories; brick and stone; cost \$40,000.

WAREHOUSES

Baldwin, Miss.—Farmers' Union Co-operative Warehouse Co. incorporated with \$5000 capital stock by J. M. Cornelius of Baldwin, J. S. Stephens and W. J. Beacham, both of Marietta, Miss., and others.

Booneville, Ark.—Booneville District Farmers' Union will erect warehouse. Committee has been appointed consisting of W. H. Broom, Jess Caldwell, E. L. Craft and others.

Childress, Texas.—Farmers' Union Warehouse Co. incorporated with capital stock of \$3000 by M. E. Tarwater, J. T. King and W. O. Hughes.

Clinton, Ky.—Hickman County Tobacco Warehouse Co. organized with \$4000 capital stock to erect tobacco warehouse; J. M. Ringo, president; C. V. Heaslet, vice-president, and E. B. Samuels, secretary-treasurer.

Cuero, Texas.—R. C. Flick has rejected bids for erection of warehouse recently mentioned; plans by Julius Leffland, Victoria, Texas; building to be 50x130 feet; two-story brick; lower story to have no floor, to be used for wagon storage; fireproof windows and doors; vehicle elevator to be installed; cost of building, \$7500.

Dardanelle, Ark.—Planters & Spinners' Bonded Warehouse Co. incorporated with \$10,000 capital stock. W. D. Cotton is president, J. A. Smith vice-president and E. B. Cotton secretary-treasurer.

Elizabeth City, N. C.—W. J. Woodley will erect two-story brick warehouse.

Flintonia, Texas.—Flintonia Farmers' Union Warehouse Co. incorporated by J. J. Sullivan, H. E. Cole, E. M. Burke, J. E. Huff and others.

Jacksonville, Fla.—St. John's River Terminal Co. (Southern and Georgia Southern & Florida Railway companies) has awarded contract to the Halsena-Woodcock Construction Co. for erection of proposed brick warehouses; one building, to be used for freight and office purposes, to be two stories high, 210x30 feet; team tracks paved with vitrified brick near structure; second warehouse to be one-story high, 210x50 feet and used for freight purposes; S. F. Parrott, president. (Previously mentioned.)

Manitou, O. T.—Farmers' Union Warehouse Co. incorporated by H. B. Hill and A. T. Fryer, both of Manitou; W. J. Eason, Davidson, O. T., and others.

Utica, Miss.—Utica Warehouse Co. is inviting bids on erection of its proposed cotton warehouse; \$8000 available for expenditure.

Waycross, Ga.—Sea Island Cotton and Warehouse Storage Association incorporated with \$10,000 capital stock to erect warehouse, etc., by D. A. Jordan, H. F. Jeffords, J. J. Henderson, J. H. Bennett and others.

RAILROAD CONSTRUCTION RAILWAYS

Bamberg, S. C.—The Bamberg, Ehrhardt & Walterboro Railway Co. has been organized by electing directors as follows: H. J. Brabham, G. Frank Bamberg, J. A. Wyman, Aaron Rice and J. F. Folk of Bamberg; C. W. Garbis of Denmark; Dr. J. L. Copeland, H. A. Hughes and J. M. Dannelly of Ehrhardt, S. C.

Baton Rouge, La.—The Colorado Southern, New Orleans & Pacific Railway will, it is reported, soon begin construction of its terminal yards across the river from Baton Rouge. B. B. Gordon is chief engineer at Beaumont, Texas.

Beaumont, Texas.—B. B. Gordon, chief engineer of the Colorado Southern, New Orleans & Pacific Railway, is reported as saying that the line is practically completed from Beaumont to Baton Rouge with the exception of the Atchafalaya river bridge, and he is confident that will be finished in time to open the line on January 1.

Cleveland, Tenn.—J. W. Adams and associates of Chattanooga, through James E. Mayfield, attorney, have been granted a franchise for an electric railway in Bradley county.

Columbus, Miss.—The town of Pickensville, Ala., is reported to have voted \$7500 of bonds in aid of the Columbus, Memphis & Pensacola Railroad Co., which proposes to build from Aberdeen, Miss., via Columbus to Pickensville.

Columbus, Miss.—The Columbus, Memphis & Pensacola Railroad Co. is reported to have changed its name to the Aberdeen & Tombigbee Valley Railroad Co., and it is stated a line will be built through Chickasha, Mon-

roe and Lowndes counties southward, then crossing into Alabama.

Fayette, Miss.—The Yazoo & Mississippi Valley Railroad (Illinois Central system) is surveying for a branch from Melton Station to King's Point, on the Mississippi river, about 16 miles. A. S. Baldwin is chief engineer at Chicago.

Eureka Springs, Ark.—Hon. George Sengel writes from Fort Smith to the Manufacturers' Record confirming report that he and others now control the Citizens' Electric Co. of Eureka Springs and he is president; address, Fort Smith. The purchase includes electric railway and other property.

Floydada, Texas.—The Llano Estacado Railroad Co. has been organized to build its proposed line from Floydada northwest to connect with the Santa Fe and probably further to connect with the Rock Island; W. W. Massie, president and general manager; A. B. Duncan, vice-president; W. T. Montgomery, treasurer; R. C. Scott, secretary; R. C. Andrews, solicitor. A. B. White, E. C. Henry, J. D. Starks, A. C. Bowers, R. A. Childers, W. W. Nelson and C. Surginer are also directors.

Fort Worth, Texas.—Contract is reported signed for the grading of the Fort Worth, Weatherford & Mineral Wells Interurban Electric Railway projected by Gid R. Turner of New Orleans, the work to be done by the Suderman-Dolson Company of Houston, Texas. C. M. Davis is chief engineer for the railway, and Joseph Davis represents the contractor.

Fort Worth, Texas.—J. W. Maxwell, first vice-president and general superintendent of the St. Louis Southwestern Railway, is reported as saying that the company will spend over \$500,000 for the construction of its proposed new freight terminal between 5th and 6th streets and from Terry to Harding street, about five blocks. M. L. Lynch is chief engineer at Tyler, Texas.

Frankfort, Ky.—B. L. Dudley, superintendent, is reported as saying that the Kentucky Highlands Railroad is under construction from Frankfort via Crow and Millville to Versailles, Ky., 17 miles. Grading and track-laying are being done between Frankfort and Millville, seven miles, by the Louisville Construction Co. S. S. Bush at Louisville is president; A. A. Bond of Frankfort, chief engineer.

Galveston, Texas.—Reported that survey will be completed within two months for the proposed Yankton & Southern Railway, which is to be built from Yankton, S. D., to Galveston, Texas, and of which Fremont Hill of Yankton is president. The promoters have acquired the rights of the Houston, Sabine & Red River Railway in Texas, as heretofore reported, and will use them in construction.

Greenville, Texas.—A railway company is reported organized at Greenville for the proposed interurban railway from Greenville to Wolfe City and Bonham, Texas. The officers are J. T. Jones, president; J. Riley Green, secretary, and D. W. Sweeney of Bonham, treasurer.

Guymon, O. T.—The Guymon & Southwestern Railroad Co. has been chartered to build a line from Guymon east to Englewood, Kan., on the Santa Fe, and west from Guymon to a connection with the Santa Fe in New Mexico; capital \$5,000,000. The directors are J. W. Harris, J. G. McLarty, E. C. Langston, J. H. Wright, J. W. Rumage, L. E. Latham, J. L. Eddins, T. O. James and W. C. Crow, all of Guymon, and Jonathan S. Whitehurst of New York.

Hammond, La.—The Hammond Lumber Co. is reported to have completed 10 miles of standard-gauge railroad to a point northwest of Hammond, and by connection with the 20-mile line of the Houlton Lumber Co. will make a through route of 30 miles between Hammond and Houltonville.

Henrietta, Texas.—The Henrietta, Graham & Baird Railroad Co. is reported to have completed 20 miles of grade out of Henrietta, and tracklaying will begin soon. This statement is credited to J. B. Stokes, secretary-treasurer and general manager of the company at Baird, Texas.

High Point, N. C.—Seven miles of grade are reported complete on the line being built by Dee Allen and others to connect High Point with Thomasville, Greensboro and Winston-Salem. The line to Thomasville is to be finished first.

Knoxville, Tenn.—William J. Oliver is reported as saying that financial arrangements have been perfected to build the Knoxville, Sevierville & Eastern Railroad between the two points named in the title, and also that it is intended to have a low-grade coal line to a port on the Carolina coast. Surveys have been made by W. A. Seymour and Gustaf Bottenger.

Lawton, O. T.—The plan of the Choctaw, New Castle & Western Railway Co., which has been granted a charter in Oklahoma, is to build a line from Lawton to South McAlester, I. T., about 200 miles, with a belt line at South McAlester and a branch to Krebs, I. T.; capital, \$5,000,000. The incorporators are J. R. Lebosquet of Little Rock, L. C. Rose and A. W. Underwood of Chicago and S. T. Pierson and W. P. Dix of Shawnee, O. T.

Lookout, W. Va.—The Loop & Lookout Railway Co. is reported to have begun construction on its line at Riverside. T. W. Raine and others are interested.

Marshall, Texas.—Ben B. Cain and L. L. Jester of Tyler, Texas; George T. Jester of Corsicana, Texas, and Oee Goodwin of Dallas, Texas, have, it is reported, recently become interested in the Texas Southern Railway and are considering plans for improvement. L. E. Walker is president at Marshall.

Memphis, Tenn.—The Clarksdale, Covington & Collierville Interurban Electric Railroad Co. has been granted a franchise in Shelby county for its projected line. W. A. Percy is attorney.

Millville, Ark.—J. A. Freeman, vice-president and treasurer of the Ouachita Valley Railway Co., St. Louis, Mo., is reported as saying that it proposes to build a line 28 miles long from Millville to Stark, near Eldorado, Ark. W. P. Barr is general superintendent at Millville, and M. C. Smith is president at St. Louis.

Mineral Wells, Texas.—The American Engineering Co., contractor for the Beardsley Interurban railway from Mineral Wells to Fort Worth, 50 miles, is reported to have graded already about eight miles of line. Work is to be completed as soon as possible, and when the line reaches Springtown it is to be put in operation.

Muskogee, I. T.—Reported that C. D. Hamilton has been appointed superintendent of construction for the Missouri, Oklahoma & Gulf Railroad now building.

Muskogee, I. T.—Mr. S. M. Rutherford, one of the incorporators, informs the Manufacturers' Record that the Falls Construction Co. is organized to build a railroad from Muskogee to Fort Smith, Ark. Excepting preliminary surveys, work will not begin before January 1.

Nashville, Tenn.—President H. H. Mayberry of the Nashville & Columbia Interurban Electric Railway is reported as saying that construction from Nashville to Franklin is being pushed and that cars will be running between those points by March 1 next.

Ocala, Ga.—President B. B. Gray of the Ocala, Pinebloom & Valdosta Railroad, which proposes to build from Ocala to Valdosta, 66 miles, is reported as saying that 12 miles are built from Pinebloom to Lax and that the company is doing its own construction. J. H. McCranie is chief engineer at Pinebloom, Ga.

Oklahoma City, O. T.—The Kansas & Gulfport Short Line Railway Co. has been chartered with \$36,000,000 capital to build a line from Kansas City to Port Lavaca, Texas, with a total of 1500 miles of track. Incorporators are Jasper Ragsdale and Charles F. Bridge of Topeka, Kan.; Fred A. Jerram of La Junta, Col.; Lewis E. Potts and J. P. Byrne of Oklahoma City, O. T.

Pine Bluff, Ark.—The Manufacturers' Record is informed that the proposed line of the Central Arkansas Electric Railway Co. is to run from Pine Bluff to a point near Sheridan, Ark., where it will branch, one line to run to Little Rock and another to Hot Springs, making a total of 90 miles of line. It is not expected to do any construction this year, but surveys are made and plans prepared. J. A. Holmes is president and A. M. Van Auken is chief engineer at Pine Bluff.

Selma, Ala.—Secretary J. T. Slatter of the Commercial and Industrial Association is reported as saying that a Northern company is considering plans to construct an electric railway from Selma to Marion, Ala.

Stephenville, Texas.—The Stephenville North & South Texas Railway Co. has, it is reported, registered \$322,000 of first mortgage 5 per cent. bonds on 20 miles of line from Stephenville toward Hamilton, Texas, the total distance there being 45 miles.

St. Louis, Mo.—The Carondelet & Webster Groves Railroad Co. of St. Louis has been chartered with \$200,000 capital to build a line from St. Louis to Webster Groves, eight miles. The promoters are Willard E. Winner, formerly of Kansas City, but now of Webster Groves; J. G. Hughes and Edwin B. Winner of Webster Groves, and A. G. Bodwell and Henry G. Pert of Kansas City.

St. Louis, Mo.—Construction has begun on the St. Louis, Monticello & Southeastern Railway, which is to run from St. Louis to Flat River, Mo., 65 miles. Charles A. Gutke is president, 5727 Von Versen avenue, St. Louis.

Sumter, S. C.—Mr. W. Loring Lee writes the Manufacturers' Record confirming a previous press report that he has been surveying for an extension of the Betts Lumber Co.'s railroad. Present line is now about 12 miles long from a point on the Atlantic Coast Line three miles east of Sumter southeast to a point near Black river. No contracts are being let.

Tarboro, N. C.—President H. C. Bridgers of the East Carolina Railway is quoted as announcing the opening of its line south of Farmville to a point north of the river at Hookerton, the extension being 13 miles long. Line will be completed into Hookerton about January 1.

Walkersville, W. Va.—The Walkersville & Ireland Railroad Co., recently chartered to build a lumber line from Walkersville to Marlinton, W. Va., has organized with the following officers: W. H. Bailey, president; Harley Sawyer, vice-president, both of Grafton, W. Va.; W. B. Mick, secretary; W. H. Mick, treasurer, both of Ireland, W. Va.; B. F. Bailey of Grafton, attorney.

Washington, D. C.—The Baltimore & Ohio Railroad, it is reported, is contemplating construction of its proposed branch to Georgetown, D. C., and also the construction of a freight yard there. D. D. Carothers is chief engineer at Baltimore, Md.

Wheeling, W. Va.—The Baltimore & Ohio Railroad is reported to have begun work on the Cumberland, Unlontown & Wheeling Railroad, a short line projected from Bidwell, Pa., on the Baltimore & Ohio Pittsburgh Division, to coal fields in West Virginia. Sims & Co. of Philadelphia have the contract.

Wichita Falls, Texas.—The Wichita Falls & Northwestern Railroad Co. has registered \$248,000 of bonds, covering 17 miles of completed line from Wichita Falls to the Red river.

STREET RAILWAYS

Bluefield, W. Va.—The street-railway franchise requested by E. T. Oliver and E. L. Bailey has, it is reported, been granted by the City Council.

Bristol, Tenn.—The Bristol Belt Line Railway Co. has been granted a franchise to operate street cars on 4th street.

Fayetteville, N. C.—Reported that A. G. Bishop of Haines & Bishop, New York, has purchased one-third interest in the Fayetteville Street Railway & Power Co., of which W. D. McNeill is president. The company is now constructing its line.

Houston, Texas.—The Houston Electric Co. is reported to have acquired the motor-car line of Brooke, Smith & Co., and will extend it.

Jacksonville, Fla.—The Jacksonville Electric Co. has been granted a franchise to extend its line on Lincoln avenue to the new shops of the Seaboard Air Line.

St. Augustine, Fla.—T. R. Osmond, general manager of the St. Johns Light & Power Co., is quoted as saying that it is planning to build five miles of track.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—General Heating & Pipe Co., 413 Canal-Louisiana Bank Building, New Orleans, La., in market for motor-driven air compressors for pipe-bending machines from one to eight inches.

Alcohol Engine.—Knight & Wall, Havana, Cuba, wants price on alcohol engine for operating 20 tools for machinists and boiler-makers' use. They invite full details.

Automatic Sprinklers.—John T. Nolde, 916 Olive street, St. Louis, Mo., wants automatic sprinklers.

Bobbin Machinery.—A. J. Baldwin & Co., 102-104 Main street, Dawson, Ga., wants to correspond with manufacturers of machinery for making bobbins for cotton mills.

Blower System.—Galax Furniture & Lumber Co., Galax, Va., wants blower system.

Boiler.—H. W. Doney, manager Big Three Heading Co., Maryland, Tenn., will want 35-horse-power boiler.

Boiler.—E. Elkan, manager Crescent Laundry Co., Macon, Ga., wants 50-horse-power boiler.

Boiler.—A. J. Hickerson, McGregor, Texas, wants prices on boiler for cotton gin.

Boiler.—Sealed bids will be received by city of Sherman, Texas, at office of Henry Zimmerman, City Secretary, up to October 21 on one 350-horse-power boiler of water-tube type; boiler to be designed to carry not less than 150 pounds steam pressure. Also a bid to furnish all labor and material for complete erection on a foundation to be furnished by city, and a bid f. o. b. cars Sherman and man to superintend erection; C. A. Craycroft, Mayor.

Bollers.—Glen Morris Supply Co., Glen Morris, Md., wants prices on bollers.

Bracket Machinery.—Geo. E. Lum Machine & Supply Co., Birmingham, Ala., in market for machinery to cut and turn telephone-pole brackets.

Bridge Construction.—T. F. H. Peck, chairman Township Board, Johns Island, S. C., will open bids October 20 for building bridge 102 feet long and 15 feet wide connecting Johns Island with Wadmalaw; also two concrete bulkheads. Specifications can be obtained on application to chairman; usual rights reserved.

Bridge Construction.—Washington & Berkeley Bridge Co., Edward W. Byron, secretary, Williamsport, Md., will open bids October 20 for construction of reinforced concrete arch bridge, 15 spans, total length 1570 feet, over the Potomac river at Williamsport. Plans and specifications on file at Cushwams & Sons' office at bridge site and of Mason D. Pratt, consulting engineer, Harrisburg, Pa.; certified check, \$1000.

Building Material.—Miller Reese Hutchison, No. 1 Madison avenue, New York, N. Y., wants six catalogues and six export price-lists of building materials.

Building Materials and Equipment.—Lenoir Hardware & Furniture Co., Lenoir, N. C., invites bids on any material and equipment for building 68x119 feet, three stories high, according to plans and specifications obtainable from the architects, Hook & Rogers, Charlotte, N. C. (See building note under "Miscellaneous Structures.")

Cannery Equipment.—Robert M. Troy, care of Huntsville & Monte Sano Improvement Co., Huntsville, Ala., wants equipment for tomato cannery of about 100,000 cans capacity.

Canning Machinery.—Vernon M. Green, Occoquan, Va., wants addresses of manufacturers of canning machinery.

Cotton Gin.—A. J. Hickerson, McGregor, Texas, will need prices on gin outfit.

Crane.—Eagle Casting Co., Winchester, Ky., wants second-hand 24-foot electric crane.

Crushers, etc.—Glen Morris Supply Co., Glen Morris, Md., wants prices on crushers and pans.

Dredging.—Sealed proposals will be received at office of Treasurer, Southern Branch, N. H. D. V. S., National Soldiers' Home, Elizabeth City county, Va., until November 1 for dredging channel extension, Jones' creek, 498 cubic yards, more or less, as per accompanying specifications and drawings, in accordance with instructions and specifications, copies of which, with blank proposals and other information, may be had upon application to John T. Hume, treasurer.

Dredging Equipment.—Canadian-American Loud Gold Mines, Ltd., E. E. N. Bertram, engineer, Cleveland, Ga., wants prices on modern bucket dredge; electric power; to handle 2500 to 3000 cubic yards gravel per 24 hours.

Drykiln.—Messrs. Kelmes & McAtier, Lindsay, S. C., want equipment for new drykiln.

Electrical Machinery.—Miller Reese Hutchison, No. 1 Madison avenue, New York, N. Y., wants six catalogues and six export price-lists of electrical machinery and supplies.

Electrical Machinery.—Galax Furniture & Lumber Co., Galax, Va., wants prices on dynamos, motors and other electric equipment.

Elevator.—Komp Machinery & Supply Co., Hattiesburg, Miss., will be in market for electric elevator.

Elevators.—John T. Nolde, 916 Olive street, St. Louis, Mo., wants prices on passenger and freight elevators.

Elevator Machinery.—J. W. McCanse, president Farmers' Elevator & Cold Storage Co., Mount Vernon, Mo., wants equipment of elevator machinery, including dump scales.

Engine.—A. J. Hickerson, McGregor, Texas, will need prices on engine (probably gasoline).

Engine.—See "Alcohol Engine."

Engine.—H. W. Doney, manager Big Three Heading Co., Maryland, Tenn., will want 25-horse-power engine.

Engine.—Galax Furniture & Lumber Co., Galax, Va., wants prices on engine.

Engine.—Seneca Oil Mills, Seneca, S. C., wants prices on 100-horse-power Corliss engine. Address J. S. Mullen, chief engineer.

Engines.—Miller Reese Hutchison, No. 1 Madison avenue, New York, N. Y., wants six catalogues and six export price-lists of gasoline, gas and oil engines.

Engines.—Glen Morris Supply Co., Glen Morris, Md., wants prices on engines.

Fertilizer Screen.—G. A. Dunlop, 525 Empire Building, Atlanta, Ga., wants second-hand fertilizer screen complete with housing and gearing; reel about 36 inches in diameter by 10 feet in length.

Flooring.—Stone Printing & Manufacturing Co., Roanoke, Va., wants suggestions and prices on a material to remedy defective work in a granolithic flooring; latter is laid, and portions of cement being inadequate, wear is already shown; this results in the circulation of dust when the floors are swept, and the dust settles on the machinery and materials.

Flooring Machinery.—John N. Piver, Lakeland, Fla., wants to correspond with manufacturers of machinery for converting small logs, 6, 8 and 10 inches in diameter, into rift flooring strips one and one-half and two inches wide; also machinery for dressing and matching same.

Furniture Machinery.—See Woodworking Machinery; see Glue Pots, etc.

Gasoline-Manufacturing Machinery.—Thos. C. Hall, Charleston, W. Va., wants equipment of machinery for manufacturing gasoline from gas.

Gasoline Engine.—See "Engine."

Glass Novelty Manufacturers.—T. A. Ausley, Donaldsonville, Ga., wants to correspond with glass novelty manufacturers relative to awarding contract for several hundred thousand hollow glass balls.

Glass (prism and plate).—John T. Nolde, 916 Olive street, St. Louis, Mo., wants prism and plate-glass front 82x100 feet.

Glue Pots, etc.—Galax Furniture & Lumber Co., Galax, Va., wants prices on glue pots, cookers and presses.

Grading.—Bids will be opened October 31 for grading of first seven miles of Shreveport & Gulf Railroad. Profiles, specifications and full information may be obtained at office of E. H. Ludlow, chief engineer, Washkom, Texas.

Heading Saw.—H. W. Doney, manager Big Three Heading Co., Maryland, Tenn., will want second-hand Trevor heading saw machine.

Heating.—See item under "Schools," Dermott, Ark.

Holst.—B. H. Sprinkle, Knoxville, Tenn., wants hand-power cellar holst of 1000 pounds lift.

Hydraulic Presses.—See "Presses."

Ice Plant.—Wanted.—Proposals for complete equipment and installation at Hubbard City, Texas, of 25-ton ice-making and 50-ton refrigerating machinery for plants of Union Central Light & Ice Co. Address J. P. Hornaday, financial agent, 27 William street, New York City.

Laundry Machinery.—Joseph E. Bowen, Norfolk, Va., is in market for laundry outfit; sufficient size to accommodate town of 1500 inhabitants.

Laundry Machinery.—Crescent Laundry Co., Macon, Ga., E. Elkan, manager, wants laundry machinery.

Levee Construction.—Bids will be opened November 16 at United States Engineer Office, Riegler Building, Little Rock, Ark., for constructing 248,000 cubic yards of levee work opposite Pine Bluff, Ark., on Arkansas river; information on application; Wm. D. Connor, captain engineers.

Logging Cars.—J. H. Macleary, Suffolk, Va., in market for 15 36-inch-gauge logging cars, Russell pattern preferred; 30,000 pounds capacity.

Logging Trucks.—J. H. Macleary, Suffolk, Va., is in market for six 42-inch-gauge logging trucks, Russell pattern preferred. Quote dealer's price and condition f. o. b. Suffolk.

Machine and Hand Tools.—Miller Reese Hutchison, No. 1 Madison avenue, New York,

N. Y., wants six catalogues and six export price-lists of machine and hand tools.

Machine Tools.—Galax Furniture & Lumber Co., Galax, Va., wants emery stand, knife grinder and belt-polishing machine.

Mill Machinery.—Glen Morris Supply Co., Glen Morris, Md., wants prices on mill machinery.

Mill Supplies.—Galax Furniture & Lumber Co., Galax, Va., wants belts, hangers and shafting.

Mining Machinery.—Miller Reese Hutchison, No. 1 Madison avenue, New York, N. Y., wants six catalogues and six export price-lists of mining machinery and supplies.

Ornamental Brick.—John M. Harkins, Alabama Hotel Block, Anniston, Ala., wants to correspond with manufacturers of ornamental brick made of slate.

Paving.—Board of Bond Trustees, L. Hilton Green, chairman, Pensacola, Fla., will open bids November 15 for grading, laying about 170,700 square yards of clay or shale blocks, sheet asphalt, bitulithic, wood block or macadam pavement and 115,350 linear feet of concrete curb; certified check \$5000, drawn on some bank in Pensacola and made payable to Board of Bond Trustees of Pensacola. Specifications and blank forms of proposals can be obtained by application to chairman Board of Bond Trustees or to T. Chalkley Hatton, chief engineer, Wilmington, Del., and full set of plans can be seen at latter's office, either in Wilmington or Pensacola; usual rights reserved.

Piping.—Fair Grounds Improvement Co., Jacobs Building, Clarksburg, W. Va., wants piping for natural gas.

Piping, etc.—Miller Reese Hutchison, No. 1 Madison avenue, New York, N. Y., wants six catalogues and six export price-lists of pipe fittings and pipes.

Planing Plant.—Messrs. Kelm & McAtter, Lindsay, S. C., want planing mill machinery.

Plumbing.—See item under "Schools," Dermott, Ark.

Plumbing.—See item under "Sewer Construction." (Machinery Wanted.)

Presses.—Gulf Rice Milling Co., Welsh, La., wants presses for pressing rice hulls into form for fuel.

Printing Presses.—Seneca Publishing Co., Seneca, S. C., wants presses, etc., on job-printing presses.

Pumps.—Canadian-American Loud Gold Mines, Ltd., E. E. N. Bertram, engineer, Cleveland, Ga., wants prices on all sizes of hydraulic pumps.

Pumps, etc.—Sealed proposals will be received at office of General Purchasing Officer, Ithman Canal Commission, Washington, D. C., until November 8 for furnishing boiler-feed pumps, Portland cement, etc. Plans and information relating to Circular No. 397 may be obtained from above office or offices of assistant purchasing agents, 24 State street, New York; Custom-house, New Orleans; 1086 North Point street, San Francisco, and 410 Chamber of Commerce Building, Tacoma; also from Chief Quartermaster, Chicago; Depot Quartermaster, St. Louis; Depot Quartermaster, Jeffersonville, Ind.; and Chief Quartermaster, Atlanta, Ga., and at United States engineer offices in Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul; Detroit and Milwaukee. H. F. Hodges is general purchasing officer.

Rails.—Peacock's Iron Works, Selma, Ala., in market for three miles of second-hand 25-pound relaying rails.

Rails.—Dallas Coal Co., J. E. Finney, president, Huntington, Ark., in market for 50 gross tons 56-pound relaying rails for side-tracks to mines.

Railway-car Trucks.—See "Logging Trucks."

Railway Equipment.—See "Logging Cars."

Railway Equipment.—Miller Reese Hutchison, No. 1 Madison avenue, New York, N. Y., wants six catalogues and six export price-lists of railway equipment and supplies.

Railway Equipment.—Peacock's Iron Works, Selma, Ala., in market for standard-gauge locomotive; 10 to 15 tons weight; second-hand.

Refrigerating Machinery.—See "Ice Plant."

Safe.—J. C. Dunbracco, 314 East Capitol street, Washington, D. C., in market for a safe, and wants to correspond with manufacturers; desires prices and full information.

Sawmill Equipment.—Gibbs Machinery Co., 804 West Gervais street, Columbia, S. C., want following second-hand machinery: 7 or 8-foot band-saw mill, 16-foot carriage, 9-inch gunshot feed, two-saw 20-foot trimmer, live rolls, steam kniger, hand-feed shingle machine, double-knot saw; full description and price.

Sawmill Machinery.—Miller Reese Hutchison, No. 1 Madison avenue, New York, N. Y., wants six catalogues and six export price-lists of sawmill machinery and supplies.

Scales.—Farmers' Elevator & Cold Storage Co., J. W. McCanse, president, Mount Vernon, Mo., wants dump scales for elevator.

Sewer Construction.—Bids will be opened November 11 at Treasury Department, office of James Knox Taylor, supervising architect, Washington, D. C., for sewerage and plumbing at Santa Rosa Quarantine Station, Pensacola, Fla., in accordance with specifications, copies of which may be obtained at above office or office of custodian of station, Pensacola, Fla., at discretion of supervising architect.

Sewer Construction.—Henry Zimmerman, City Secretary, Sherman, Texas, will open bids October 31 for construction of sewer system one mile long, according to plans and specifications on file in his office. Engineer's estimates of material is as follows: 3000 linear feet of 10-inch pipe, 1000 linear feet of 8-inch pipe, 750 linear feet of six-inch pipe, 17 manholes averaging six and two-thirds feet deep, and one flush tank. Ditch will average seven feet, with maximum depth of ten; rock excavation, 225 cubic yards; usual rights reserved; C. E. Craycroft, Mayor.

Steam and Plumbing Supplies.—General Heating & Pipe Co., 413 Canal-Louisiana

Bank Building, New Orleans, La., is in market for steam and plumbing supplies.

Steam Plant.—Miller Reese Hutchison, No. 1 Madison avenue, New York, N. Y., wants six catalogues and six export price-lists of steam-plant machinery and supplies.

Tanks.—Oconee Knitting Mill, Walhalla, S. C., wants 25,000-gallon cypress tank.

Telephone Equipment.—Theo. S. Meekins, Roanoke Island Telephone Co., Manteo, N. C., wants telephones and telephone fixtures.

Well-drilling Machinery.—J. McD. Greene, Drexel Building, Philadelphia, Pa., wants Star No. 4 deep-well drilling machine.

Well Drilling.—Livingston Ice Co., Seneca, S. C., wants to correspond with deep-well drivers of artesian wells.

Woodworking Machinery.—Galax Furniture & Lumber Co., Galax, Va., wants prices on planers, moulders, jointers, glue jointers, tenon machines, double cut-off saw, band saws, scroll saw, lathe, rip saws, dove-tail mortise, variety saw, borers, drum sanders, panel saw, shaper, glue spreader, swing cut-off saw, belt sanders and drawer-fitting machine.

Woodworking Machinery.—See "Flooring Machinery."

Woodworking Machinery.—See "Bobbin Machinery."

Woodworking Machinery.—See "Bracket Machinery."

INDUSTRIAL NEWS OF INTEREST

Locomotive for Sale.

On November 2 there will be offered for sale at Bellamy, N. C., a Davenport locomotive. Details can be obtained by addressing R. C. Lawrence, Lumberton, N. C.

Big Order for Vises.

What is said to be the largest order ever placed for vises has just been awarded the Pittsburgh Automatic Vise & Tool Co. of Pittsburgh, Pa., by the Washington Terminal Railroad for use in the latter's extensive new shops which have just been erected. The tools are furnished in both the double and single-swivel types.

An Enterprise Making Progress.

The Cincinnati Frog & Switch Co. has modern shops at Oakley, a suburb of Cincinnati, Ohio, and a commodious and comfortable office adjacent. Though less than a year old, the company has secured and is holding orders for frogs and switches and the various materials that enter into railroad work, besides making a specialty of special work for mills, mines and plantations.

Gas Engine Specialists.

Messrs. Illmer & Co., Fourth National Bank Building, Cincinnati, Ohio, have found business particularly active. It may be the unique character of their work that has been responsible for this activity. The firm is composed of experts in gas engines, and its work has been along the lines of examinations of conditions, reports as to engines and special designs to fit special cases. Louis Illmer, Jr., is the chief engineer.

Contract for Coal-Gas Producer.

That leading operators continue to be impressed with the advantages of gas-producer plants is indicated in a contract recently closed by the International Gas Power Co. of St. Joseph, Mo., and Chicago, Ill. This contract is from the Hoopeston (Ill.) Gas & Electric Co. and calls for the installation of a 300-horse-power bituminous-coal gas producer to be used in combination with a Munzel engine.

Southern Farm Home for Sale.

Parties who are interested in the purchase of Southern farm homes are invited to investigate the offer for sale of the Bailey property near Greenwood, S. C. This comprises 71 acres of land, modern 10-room dwelling, seven acres of land growing pecan trees, three acres growing fruit, etc. Location is just outside of Greenwood city limits and the land lies level. Write Geo. B. Bailey for further particulars.

Regarding Teredo-Proof Paint.

Last week was presented an interesting letter from the Atlantic & Pacific Company of Tampa, Fla., referring to the gratifying results that company has attained in using teredo-proof paint. Inadvertently it was not mentioned that the Teredo-Proof Paint Co. of 17 Battery place, New York, is the manufacturer of that paint. This company especially invites investigation of the qualities of its product by people who want to protect their docks, piling and all submerged and

exposed timbers from the ravages of the teredo, ants, salt-water worms, other destructive water life and ordinary deterioration.

For Factory Purposes.

Manufacturers needing a Southern location are invited to write to Doak Aydelott of Tullahoma, Tenn., regarding his offer of a factory building now available for some industry. The site has on it a 66x120-foot building, 50x100 feet on second floor, which can be leased for manufacturing purposes, or the property will be put in stock of a company. Tullahoma is an outlet for extensive coal and timber territory.

Preparing Plans for New Buildings.

Mr. C. Gadsden Sayre, architect, of Anderson, S. C., associated with H. J. Baldwin, has recently been commissioned to prepare plans for the erection of a high-school building at St. George, S. C.; graded-school building at North, S. C., and a graded-school building at Greensboro, Ga. Messrs. Sayre and Baldwin make a specialty of school work, giving particular attention to heating, ventilating and the distribution of light.

Union Fiber Co.

Those who are interested in the use of lith and linolet are invited to note that the Union Fiber Co., manufacturer of the materials named, has removed its New York offices to 500 Fifth avenue, Room 311, in charge of Walter Pendleton, district manager for the company. The company's main offices and plant are at Winona, Minn. Its products are for insulation, etc., in cold-storage plants, breweries, refrigerator cars, buildings and other structures.

Albany (Ga.) Mill Supply Co.

In referring to the Albany Mill Supply Co. last week an error occurred in crediting the enterprise to New York. The company is located at Albany, Ga., as is well known to a large clientele of buyers of mill machinery and supplies. It is now occupying its new two-story 50x210-foot building, where a large stock of mechanical equipments and accompanying supplies needed for mills, factories and other manufacturing enterprises are carried in order to insure prompt shipments to purchasers.

For Filtering Milk.

Referring to the question of pure and clean milk as a sanitary and economic problem, the International Filter Co. of 17th street and Wabash avenue, Chicago, Ill., invites attention to its milk filter. This device is offered as simple, economical, rapid and efficient, removing all the foreign matter from milk without affecting the quality. A description of the method in which the device performs its functions is presented in an illustrated leaflet which the company issues. Requests for a copy are invited.

American Water Softeners and Filters

The superiority of soft water and its economy for use in locomotive and stationary boilers in industrial plants and for dyeing, tanning, ice-making, laundries, etc., is very

well recognized. The American Water Softener Co., 1011 Chestnut street, Philadelphia, Pa., and Columbus, Ohio, manufacturing under the Bruun-Lowener and its own patents, is producing a water-softener claimed to be capable of delivering soft water by a thoroughly simple, accurate and economical method. Every plant, it is said, is specially designed to meet local conditions and will give definite results at a given cost. This company has also purchased the patents of the Hungerford Filter Corporation for the manufacture of pressure and gravity filters, employing the Hungerford sand valve.

32-Ton Steel Door for Vault.

The massiveness of construction employed in building vaults nowadays for banking and other financial institutions was well indicated last month in the handling of a 32-ton steel door at Butte, Mont. This door has a dead weight of 64,000 pounds. It is 8x10 feet in size, more than a foot thick, and was transported to Montana on a special steel flat car. It was necessary to haul this door up a steep hill, and 36 horses were required to effect the removal, the teams being strung out in sixes. A special wagon was rigged up for the occasion, 12 front wheels of ore wagons coupled by 12x12 timbers being used. It is of interest to mention that this 32-ton steel door was built by the York Safe & Lock Co. of York, Pa., the well-known manufacturer of fire and burglar-proof safes, banks, etc.

Concrete Mixer on Trial.

Attesting its confidence in the merits of its products, the Knickerbocker Company of Jackson, Mich., offers to ship concrete mixers on trial, allowing the prospective purchaser five working days in which to test the machine in operation. The success of this idea has recently been shown in the sale of a power machine, with engine, to Ring & Powell of Corpus Christi, Texas. This firm desired a machine for quick delivery and wired an order in the morning. It was on the road by night, and in two hours after unloading it at its destination was put in operation. Correspondence from Ring & Powell to the manufacturer stated that it was operated without difficulty and perfectly mixed material as fast as two men could shovel it. It has been used on different materials and different proportions, ranging from the finest sand to the coarsest gravel, giving pleasing results in every case.

New Company Will Increase Facilities

The assets of Taplin, Rice & Co. of Akron, Ohio, have been purchased by William Clerklin, who has organized the Taplin-Rice-Clerklin Company with a capital stock of \$250,000. It is the intention of the new company to make extensive improvements to its plant, including the erection of two large buildings, one for a machine shop 80x200 feet, to be equipped with traveling cranes. The other structure will be used as a factory building and will be 80x200 feet, with an L 80x150 feet. These added facilities are made necessary by reason of the increasing demand for the company's products, which include Climax stoves, ranges and furnaces, and clay and sewer pipemaking machinery. The company intends to establish supply depots during the next few months at Peoria, Ill.; Minneapolis, Minn.; Kansas City, Mo.; Louisville, Ky.; Chattanooga, Tenn.; Newcastle, Pa.; Rochester, N. Y., and Chicago, Ill. It expects to manufacture a complete line of steam and hot-water boilers.

Modern Electroplating Plant.

A modern electroplating plant has been lately installed by the Murray Engineering & Manufacturing Co. at its works in Washington, D. C., and that company is now in a position to handle any kind of galvanizing, nickel, brass and copper plating and metal finishing. Thoroughly modern machine and boiler shops have been operated by the company for some years, and in these departments repairing of all kinds of heavy and light machinery is taken care of, also high-grade blacksmithing, including heavy and light forgings, experimental and model work for inventors, contract manufacturing and turret lathe and milling machine work. In addition, it manufactures a special line of improved roller bearings for shafting and heavy drivers, by the adoption of which it claims from 30 to 70 per cent. saving of power can be made. By the use of electricity both for power and light, automatic time clocks and an extensive cost system, the company is in a position to offer to the trade results that will be found prompt, reasonable in price and satisfactory. Full information concerning any of these specialties and expert advice on power, steam consumption, etc., will be furnished to those interested.

TRADE LITERATURE.

Templets for Generating Units.

Consulting engineers, architects and others who have occasion to plan power plants will find of use a set of templets issued by the Ridgway Dynamo & Engine Co. of Ridgway, Pa. The set shows the floor space occupied by the company's standard generating units in sizes from 10-kilowatt to 200-kilowatt, inclusive, the templets being made to a scale of one-quarter inch to the foot.

Publicity Engineering.

Productive publicity as a necessity in modern methods of manufacture and sale of machinery has developed the publicity engineer. Among those who have entered this field of activity may be mentioned Walter B. Snow of 170 Summer street, Boston, Mass. Mr. Snow is a graduate of the Massachusetts Institute of Technology, has had practical experience as an engineer, teacher and lecturer, and has contributed to the technical press. He has recently issued a booklet containing interesting data relative to his new field of work.

Service Meter for Telephones.

A folder now being distributed gives information regarding the Dean Type C service meter for telephones. It states that a service meter to be distinctly efficient must primarily be positive in action and not subject to any irregularities due either to malicious tampering or to the ordinary strains of service. Other requirements are also mentioned, and then a description of the construction of the Dean meter is given to show that it fulfills the needs of telephone users and telephone companies. The meter named is one of the various products of the Dean Electric Co. of Elyria, Ohio.

Versatility of Reinforced Concrete.

Facts about reinforced concrete and its many ramifications and possibilities are distinctly brought out in a series of pamphlets combined in booklet form by the Ferro-Concrete Construction Co., Cincinnati, Ohio. Not only do these describe the various phases and features of the buildings the company has constructed, but many of the more important are illustrated and have accompanying letters from the owners or architects concerning the results attained. The work of this company is particularly noteworthy in that in addition to constructing numerous buildings for widely varied purposes, it has built the tallest reinforced concrete structure in the world—the 16-story Ingalls office building in Cincinnati.

Refrigerating Equipments for Any Purpose.

Many people use ice for refrigerating purposes because they think they have to, but not because they want to. They should know that automatic refrigerating equipments can be purchased for easy installation in any place, in small or large sizes. Certain engineers have made a specialty of designing automatic refrigerating apparatus which the Automatic Refrigerating Co. of Hartford, Conn., manufactures. It is claimed for the equipments that they can produce refrigeration with less attention, water and power, and maintain more uniform results than any other system. A folder now being distributed by the company gives some interesting data regarding the equipments.

Edison Commercial System.

It has only been in recent years that the business phonograph has reached such an appreciable degree of perfection as to make it a valuable adjunct to the office. Of the commercial systems invented and now being installed that of the Edison is claimed to have produced surprising and satisfactory results. The year 1905, it is said, marked the birth of the Edison business phonograph, which has been designed to accomplish results, valuable features claimed for it being that it instantly repeats after an interruption to the dictator, shows the length of letters, indexes the corrections to be heard by the transcriber, and combines in one instrument, costing less than a typewriter, all the requirements of an amanuensis. The appliances for the Edison commercial system are manufactured and installed by the commercial department of the National Phonograph Co. of Orange, N. J., which has issued a booklet illustrating and describing the business phonograph, together with its practical application.

Steel Castings of Every Description.

In these days, when manufacturers are so busy that shipments are frequently delayed to the purchaser's disappointment and possibly loss, the old saying that "time is money" applies forcibly. Users of steel cast-

ings have appreciated this during the year. They will therefore appreciate having their attention directed to a manufacturer which offers to save time on deliveries and reduce machining costs by shipping Keystone steel castings. These castings are described as uniformly sound, strong and tough (but not hard), to machine readily and to give a satisfactory finish. They can be bent considerably and straightened cold without breaking, and give superior wearing results, especially for gears. The Keystone castings are manufactured light and of medium weight, of every description, from one-quarter pound to 2000 pounds weight. Interesting details and descriptions are presented in a pamphlet now being mailed to those who may want to investigate the Keystone product. Keystone steel castings are manufactured by the Keystone Steel Casting Co. of Chester, Pa.

Design and Construction of Industrial Buildings.

The establishment of an industrial enterprise or the extension of an established plant is a matter of investment. Success depends upon an intelligent advance analysis of a multitude of details, among which is that especially important subject, the design and construction of the buildings required. This subject is given earnest and practical consideration in an interesting article published in the Engineering Magazine last month, and now republished by its author for distribution among those who may contemplate erecting a factory structure, a warehouse, a mill, or any kind of building for industrial purposes. The treatise goes into detail in various kinds of structures and the classes of materials and various methods employed in their construction. Views from photographs assist in elucidating the descriptive text. The author of the treatise is D. C. Newman Collins of 52 Broadway, New York. He is a consulting engineer and registered architect who gives especial consideration to the class of buildings above mentioned. Write to Mr. Collins for a copy of the treatise.

Koppel Portable Industrial Railways

Contractors, brick and cement manufacturers, stone quarriers, managers of mining and manufacturing plants, or anyone engaged in construction work or the removal of dirt, sand, rock, clay, concrete or other materials, are the operators who can effect economies in the conduct of their enterprises by using Koppel portable track and equipment. That the Koppel system is thoroughly practical is evidenced in the fact that the industrial railways comprising it have been used throughout the world for the past 35 years. The equipment is easily handled and readily removed to any location. It is fully and interestingly described in an illustrated booklet now being distributed for the information of those whom such equipments directly concern. Numerous photographic views are shown to enable the reader to appreciate instantly the economic possibilities of the Koppel system. The Arthur Koppel Company of Pittsburg, Pa., is the manufacturer, and is desirous of giving the booklet a wide distribution. Pittsburg offices in the Machesne Building; New York offices at 66 and 68 Broad street; Chicago offices in the Monadnock Block.

Latest Designs of Digging Machinery

Digging machinery is a class of equipment that enters into numerous avenues of industrial activity. It is used for building canals, lakes, railways, sewer systems and irrigation plants, for dredging and otherwise improving harbors, for sinking wells and developing ore beds, dredging for phosphate and other deposits, and for numerous other purposes that might be mentioned. Latest designs of digging machinery comprise the subject of an illustrated book which the Hayward Company of 97 Cedar street, New York, is now distributing. This publication is replete with illustrations and descriptions of the complete line of digging machinery manufactured by that company and which is well known to contractors throughout the entire country. Hayward orange-peel buckets, clamshell buckets, railroad excavators, derrick fixtures, steel traveling derricks, dredges, skid excavators, coal-handling machinery and other equipments are manufactured by the Hayward Company, but the pamphlet in reference, being Hayward catalogue No. 30, is especially devoted to digging machinery. Probably no user of digging machinery can investigate this class of mechanical appliances thoroughly unless the Hayward publication is consulted. The illustrations are mainly photographic reproductions, and will enable purchasers of machinery for digging for any purpose to readily appreciate the improved designs the com-

pany offers and to recognize what results can be accomplished by adopting the Hayward special types.

The Kind of Cement Used.

Successful concrete construction requires especially the highest grade of Portland cement. An illustrated pamphlet relating to this subject is now being distributed. It presents views from photographs of the Wright Building, St. Louis, 18 stories high, in which 18,000 barrels of Red Ring Portland cement were used; Shelby county courthouse, Memphis, Tenn., in which 17,000 barrels are being used; Butler Bros. Building, St. Louis, in which 80,000 barrels will be used, and it is stated this will be the largest monolithic building in the world; Ely and Walker Building, St. Louis, 60,000 barrels, and various other large and costly modern structures; also 50,000 barrels for settling basin for St. Louis water-works. The Red Ring brand of Portland cement is manufactured by the St. Louis Portland Cement Co., which says of its product: "Every barrel of Red Ring Portland cement is carefully tested before shipment, and every barrel is guaranteed to pass the United States Government specifications and the specifications of the American Society of Civil Engineers. The constantly increasing demand of Portland cement users for this high-grade brand has caused the capacity of the Red Ring mills to be more than trebled during the past few years, and further enlargements are well under way. The extreme care exercised in the manufacture of the Red Ring brand of Portland cement (insuring the finest grinding, the high tensile strength over a long period of years, the light color, even run and great sand-carrying capacity) is appreciated by engineers, architects and the Portland-cement trade generally." Company's general offices in the Liggett Building, St. Louis, Mo., and the Tennessee Trust Building, Memphis, Tenn.

FINANCIAL NEWS

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,
Baltimore, Md., October 15.

In the Baltimore stock market during the past week prices fell off, sympathizing with the decline in New York. United Railways common sold from 10 3/4 to 10 1/2; the trust certificates, 10 1/4 to 10 1/2; the income bonds from 49 1/2 to 47 1/2; the funding 5s from 77 1/4 to 76; the consolidated 4s from 82 1/2 to 81; Consolidated Gas 5s, 108; Seaboard 4s, 65 to 66; the 10-year 5s, 95; Cotton Duck 5s, 75 1/2 to 74 1/2; G. B. S. Brewing incomes, 18 1/2 to 18.

Bank of Baltimore sold at 120; Merchants' Bank, 171; Maryland Casualty, 50 1/4 to 50 1/2; Fidelity & Deposit, 121 to 120.

Other securities were traded in as follows: Northern Central Railway stock, 88 to 85; do. fractions, 89 to 87; Georgia, Carolina & Northern 5s, 99 1/4 to 100; Georgia Southern & Florida 5s, 105 1/4 to 104; Western Maryland Railroad stock, 4 1/4 to 4 1/2; Western Maryland 4s, 68 to 67 1/4; Houston Oil, 4 1/2; Atlantic Coast Line Consolidated 4s, 88; Knoxville Traction 5s, 100; Detroit United Traction 4 1/4s, 83; City & Suburban (Washington) 5s, 100 1/2; Norfolk Railway & Light 5s, 93; Baltimore City 3 1/2s, 1930, 92 to 91; Anacostia & Potomac 5s, 100; Georgia & Alabama Consolidated 5s, 99 1/4 to 99 1/2; United Traction (Pittsburg) 5s, 102 1/2; South Bound 5s, 99; West Virginia Central 6s, 102; Lexington Railway 5s, 97; Columbia & Greenville 1st 6s, 107 1/4.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended October 15, 1907.

Railroad Stocks.	Par.	Bid.	Asked.
Norfolk Railway & Light.....	25	25	28
Seaboard Company Common.....	100	10	13
United Railways & Elec. Co.....	50	10	10 1/2
Western Maryland.....	4	4	5 1/4
Bank Stocks.			
Citizens' National Bank.....	10	32	...
Commer. & Far. White Ctrfs.....	100	...	120
Drovers & Mech. Nat. Bank.....	100	238	...
Farmers & Mer. Nat. Bank.....	40	49	...
German Bank.....	100	100	...
Merchants' National Bank.....	100	171	...
National Bank of Baltimore.....	100	119 1/4	...
National Exchange Bank.....	100	...	177 1/2
National Howard Bank.....	10	12	12 1/2
National Marine Bank.....	30	37 1/2	...

National Mechanics' Bank.....	10	26	27
National Union Bank of Md.....	100	113	120
Third National Bank.....	100	110	...

Trust, Fidelity and Casualty Stocks.			
Fidelity & Deposit.....	50	118	120
Maryland Casualty.....	25	...	60
Mercantile Trust & Deposit.....	50	116	...
U. S. Fidelity & Guaranty.....	100	...	105

Miscellaneous Stocks.			
Ala. Con. Coal & Iron Pfd.....	100	74 1/2	85
Con. Cotton Duck Common.....	50	...	9
Con. Cotton Duck Pfd.....	50	25	30
Con. Gas, Elec. Lt. & P. Com.....	50	...	24 1/2
Consolidation Coal.....	100	...	88
G. B. S. Brewing Co.....	100	9	4
Georgia Creek Coal.....	100	...	76
Mer. & M. Trans. Co. Tr. Ctrfs.....	100	80	...

Railroad Bonds.			
Alabama Midland 6s.....	103	...	...
Albany & Northern 5s, 1946.....	96	...	...
Atlanta & Charlotte Ext. 4 1/4s.....	97 1/2	...	...
Atlantic Coast Line 1st 4s, 1962.....	87	...	88
Carolina Central 4s, 1949.....	...	...	89
Col. & Iron Railway 5s, 1920.....	101 1/2	...	109
Columbia & Greenville 1st 6s, 1916.....	107 1/2	...	109
Georgia & Alabama 5s, 1945.....	99 1/2	...	99 1/2
Georgia, Car. & North. 1st 5s, 1929.....	99	...	...
Georgia Pacific 1st 6s, 1922.....	113 1/4	...	...
Georgia Sou. & Fla. 1st 5s, 1945.....	104	...	105
Petersburg, Class A 6s, 1926.....	107 1/2	...	...
Petersburg, Class B 6s, 1926.....	117	...	...
Piedmont & Cum. 1st 5s, 1911.....	95	...	...
Raleigh & Augusta 1st 6s, 1926.....	120	...	...
Raleigh & Gaston 5s.....	105	...	...
Savannah, Fla. & West 5s, 1934.....	108	...	...
Seaboard Air Line 4s, 1950.....	65	65 1/2	...
Seaboard Air Line 5s, 10-year, 1911.....	94	96	...
Washington Terminal 3 1/2s.....	87	...	...
Western Maryland 4s, 1952.....	67 1/2	68 1/2	...
Western N. C. Con. 6s, 1914.....	106	107 1/2	...
West Virginia Cen. 1st 6s, 1911.....	103 1/2	103 1/2	...
Wilmington, Col. & Aug. 6s, 1910.....	102 1/2	103	...

Street Railway Bonds.			
Anacostia & Potomac 5s, 1949.....	99	...	...
Baltimore City Passenger 5s, 1911.....	102	...	...
Balto., Spar. Pt. & Ches. 4 1/4s.....	89	...	...
Central Ry. Con. 5s (Balto.), 1932.....	108 1/2	...	...
Central Ry. Ext. 5s (Balto.), 1932.....	107	...	...
Charleston Con. Elec. 5s, 1960.....	90	...	...
City & Suburban 5s (Balto.), 1922.....	106 1/2	...	...
City & Suburban 5s (Wash.), 1948.....	100	101	...
Lake Roland Elevated 5s, 1942.....	108 1/2	...	...
Lexington Ry. 1st 5s, 1949.....	100	97 1/2	...
Nashville Street Railway 5s.....	100	...	...
Norfolk Railway & Light 5s.....	93 1/2	93 1/2	...
North Baltimore 5s, 1942.....	110 1/2	...	...
United Railways 1st 4s, 1949.....	81 1/2	...	...
United Railways Inc. 4s, 1949.....	47 1/2	48	...
United Railways Funding 5s.....	74 1/2	76	...

Miscellaneous Bonds.			
Consolidated Gas 6s, 1910.....	103	...	...
Consolidated Gas 5s, 1939.....	107 1/2	108 1/2	...
Consolidated Gas 4 1/2s.....	91	...	...
G. B. S. Brewing 1st 4s.....	44 1/2	45	...
G. B. S. Brewing 2d Income.....	17 1/2	18 1/2	...
Mt. Vernon-Woodby Cot. Duck 5s.....	74 1/2	75 1/2	...
United Elec. Lt. & Power 4 1/2s.....	88	...	...

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending October 14.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	90	90
Aiken Mfg. Co. (S. C.).....	140	140
American Spinning Co. (S. C.).....	130	145
Anderson Cotton Mills (S. C.).....	74	76
Arkwright Mills (S. C.).....	120	120
Augusta Factory (Ga.).....	80	80
Avondale Mills (Ala.).....	125	...
Belton Mills (S. C.).....	122 1/2	...
Bibb Mfg. Co. (Ga.).....	113 1/4	...
Brandon Mills (S. C.).....	125	136
Cabarrus Cotton Mills (N. C.).....	127	125
Chawick Mfg. Co. (N. C.) Pfd.....	97	...
Chickamauga Mfg. Co. (S. C.).....	121	120
Clifton Mfg. Co. (S. C.).....	115	117 1/2
Clifton Mfg. Co. (S. C.) Pfd.....	100	101
Clinton Cotton Mills (S. C.).....	150	...
Columbus Mfg. Co. (Ga.).....	96	101
Courtenay Mfg. Co. (S. C.).....	100	100
Dallas Mfg. Co. (Ala.).....	96	100
Darlington Mfg. Co. (S. C.).....	80	92
East & Phenix Mills (Ga.).....	127	137 1/2
Easley Cotton Mills (S. C.).....	135	...
Enoree Mfg. Co. (S. C.).....	70	80
Enoree Mfg. Co. (S. C.) Pfd.....	100	...
Enterprise Mfg. Co. (Ga.).....	90	94
Exposition Cotton Mills (Ga.).....	225	240
Gaffney Mfg. Co. (S. C.).....	93 1/2	...
Gainesville Cotton Mills (Ga.).....	59	61 1/2
Granby Cot. Mills (S. C.) 1st Pfd.....	4 1/4	...
Greenville Mfg. Co. (S. C.).....	165	...
Greenwood Cotton Mills (S. C.).....	97	96 1/2
Grendel Mills (S. C.).....	119	...
Henrietta Mills (N. C.).....	161	176
King Mfg. Co. John P. (Ga.).....	97	100
Lancaster Cotton Mills (S. C.).....	110	...
Lancaster Cot. Mills (S. C.) Pfd.....	91	96
Langley Mfg. Co. (S. C.).....	190	...
Laurens Cotton Mills (S. C.).....	150	...
Limestone Mills (S. C.).....	140	...
Lockhart Mills (S. C.).....	92	94
Lockhart Mills (S. C.) Pfd.....	97	100
Louise Mills (N. C.).....	90	96
Marlboro Cotton Mills (S. C.).....	91	...
Mayo Mills (S. C.).....	165	185
Mills Mfg. Co. (S. C.).....	110	...
Mills Mfg. Co. (S. C.) Pfd.....	101	...
Monaghan Mills (S. C.).....	115	120
Monarch Cotton Mills (S. C.).....	107	109
Newberry Cotton Mills (S. C.).....	140	150
Norris Cotton Mills (S. C.).....	123	125
Olympia Cot. Mills (S. C.) 1st Pfd.....	65	71
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	97
Orr Cotton Mills (S. C.).....	107	...
Pacolet Mfg. Co. (S. C.).....	175	...
Pacolet Mfg. Co. (S. C.) Pfd.....	165	175
Pelzer Mfg. Co. (S. C.).....	165	175
Piedmont Mfg. Co. (S. C.).....	165	175
Poe Mfg. Co. (S. C.).....	127	128
Raleigh Cotton Mills (N. C.).....	100	105
Richland Cot Mills (S. C.) Pfd.....	85	...
Roanoke Mills (N. C.).....	140	155
Saxon Mills (S. C.).....	125	...
Sibley Mfg. Co. (Ga.).....	63	68
Spartan Mills (S. C.).....	140	145
Springstein Mills (S. C.).....	100	...
Trion Mfg. Co. (Ga.).....	137 1/2	...
Tucapau Mills (S. C.).....	200	...
Union-Buffalo Mills (S. C.) 1st Pfd.....	70	72 1/2
Victor Mfg. Co. (S. C.).....	133 1/2	135
Warren Mfg. Co. (S. C.).....	92	93 1/2
Warren Mfg. Co. (S. C.) Pfd.....	105	...
Washington Mills (Va.).....	90	40

[Continued on Page 78.]

EXTRACTS FROM
FIFTH ANNUAL REPORT
OF
THE ROCK ISLAND COMPANY

For Fiscal Year Ended June 30, 1907.

To the Stockholders of the Rock Island Company:

The Board of Directors herewith submit their report of the affairs of the Rock Island Company for the fiscal year ended June 30, 1907.

The "Income Account," "Profit and Loss Account" and "General Balance Sheet" will be found on the following pages.

Changes in the company's condition during the year are as follows:

CAPITAL STOCK.

	June 30, 1907.	June 30, 1906.	Increase.	Decrease.
Preferred:				
In hands of public.....	\$49,047,330 00	\$48,956,880 00	\$90,450 00	
In treasury.....	4,562,610 00	5,043,120 00		\$90,510 00
Total.....	\$54,000,000 00	\$54,000,000 00		
Common:				
In hands of public.....	\$89,602,402 50	\$89,448,802 50	\$153,600 00	
In treasury.....	6,397,597 50	6,551,197 50		\$153,600 00
Total.....	\$96,000,000 00	\$96,000,000 00		

The increase in stock outstanding represents the acquisition by the Chicago, Rock Island & Pacific Railroad Co. of 1293 shares of stock of the Chicago, Rock Island & Pacific Railway Co. and 360 shares of common stock of St. Louis & San Francisco Railroad Co.

Changes in the condition of Chicago, Rock Island & Pacific Railroad Co. are as follows:

FUNDED DEBT.

	June 30, 1907.	June 30, 1906.	Increase.
Four per cent. Gold Bonds (due 2002).....	\$70,067,700 00	\$69,938,400 00	\$129,300 00
Five per cent. Gold Bonds (due 1913).....	17,364,180 00	17,342,580 00	21,600 00
Total.....	\$87,431,880 00	\$87,280,980 00	\$150,900 00

The \$129,300 of 4 per cent. Gold Bonds were issued against the acquisition of 1293 shares of stock of the Chicago, Rock Island & Pacific Railway Co. The \$21,600 of 5 per cent. Gold Bonds were issued against the acquisition of 360 shares of common stock of St. Louis & San Francisco Railroad Co.

Reference was made in last year's report to the fact that the Rock Island Company had acquired a half interest (subject to the pledge thereof under the Refunding and Extension Mortgage of the Colorado & Southern Railway Co.) in the capital stock issued and to be issued, of the Trinity & Brazos Valley Railway Co. During the year in question this company has practically completed its line of railroad from Fort Worth and Dallas to Houston and Galveston, Texas.

As the Rock Island Company is the owner of the entire capital stock, except directors' shares, of the Chicago, Rock Island & Pacific Railroad Co., the income of both companies is included in the following statement.

COMBINED INCOME ACCOUNT—THE ROCK ISLAND COMPANY AND CHICAGO, ROCK ISLAND & PACIFIC RAILROAD CO.

Dividends on the Chicago, Rock Island & Pacific Railway Co. stock owned—

Two per cent. on 699,384 shares, received October 1, 1906.....	\$1,398,768 00
One per cent. on 700,397 shares, received January 2, 1907.....	700,397 00
One and one-half per cent. on 700,677 shares, received April 1, 1907.....	1,051,015 50
One per cent. on 700,677 shares, received June 30, 1907.....	700,677 00

Other income.....\$3,550,857 50

Total income.....\$3,872,417 89

Less expenses and taxes.....\$48,151 78

Less interest on Chicago, Rock Island & Pacific Railroad Co.

bonds, viz.:

Four per cent. bonds.....\$2,800,360 00

Five per cent. bonds.....868,016 67

Balance for current fiscal year.....\$155,289 44

Surplus, June 30, 1906.....296,558 48

Balance.....\$451,847 92

Deduct sundry items not applicable to surplus of current year.....289 00

Surplus, June 30, 1907.....\$451,558 92

Separate detailed statements of the receipts and disbursements of each company are shown on pages 9 and 10 of pamphlet report.

STATEMENT OF COMBINED INCOME ACCOUNT OF OPERATED LINES, YEAR ENDED JUNE 30, 1907, COMPARED WITH PRECEDING FISCAL YEAR.

	Rock Island Lines.		St. Louis and San Francisco Railroad Lines.		Chicago & Eastern Illinois Railroad.		Evansville & Terre Haute Railroad (Inc. Evansville & Indianapolis R. R.)		Total of all Roads.	
	1907.	1906.	1907.	1906.	1907.	1906.	1907.	1906.	1907.	1906.
Average mileage operated.....	7,780.26	7,218.07	5,061.72	5,068.92	947.67	947.67	310.41	310.41	14,100.06	13,545.07
Earnings:										
Freight.....	\$40,663,972 36	\$34,695,823 88	\$26,848,664 91	\$21,955,975 42	\$9,320,191 55	\$8,086,582 83	\$1,586,741 72	\$1,489,422 56	\$78,419,570 54	\$66,227,814 69
Passenger.....	16,449,765 44	13,917,930 64	9,169,400 43	7,908,644 11	1,684,348 05	1,603,016 06	587,885 04	585,218 46	27,891,898 96	24,013,909 27
Mail.....	1,356,868 48	1,138,631 15	885,662 71	704,415 22	110,393 45	110,565 66	54,487 08	53,787 46	2,407,411 72	2,007,399 49
Express.....	1,373,768 79	1,165,718 12	988,964 97	882,232 39	159,969 29	160,364 93	36,464 20	35,511 43	2,609,055 45	2,181,828 87
Miscellaneous.....	394,047 84	320,654 26	718,474 49	506,389 42	22,320 93	28,023 18	1,637 12	1,740 74	1,136,490 38	945,907 60
Total.....	\$80,238,419 91	\$51,237,558 06	\$38,621,067 51	\$32,046,666 56	\$11,337,714 27	\$9,228,562 66	\$2,267,215 26	\$2,163,680 65	\$112,464,417 05	\$95,376,757 92
Operating Expenses:										
Maintenance of way and structures.....	\$3,754,396 55	\$7,302,489 58	\$5,406,107 20	\$4,049,093 65	\$1,286,614 77	\$818,993 95	\$280,143 98	\$226,477 20	\$15,727,262 50	\$12,397,054 38
Maintenance of equipment.....	7,134,128 08	6,661,466 18	4,699,674 36	3,803,210 75	1,812,550 40	1,452,005 07	463,081 94	308,496 48	14,099,434 78	12,235,178 48
Conducting transportation.....	23,420,948 42	19,630,076 17	13,510,703 47	11,745,742 07	3,706,285 35	3,568,429 52	386,075 89	495,537 81	41,124,013 13	35,826,785 57
General expenses.....	1,884,668 95	1,473,026 60	1,156,094 33	950,486 05	371,858 22	341,060 41	74,307 52	80,906 19	3,286,925 02	2,845,479 85
Total.....	\$41,044,142 00	\$35,067,068 53	\$24,872,579 36	\$20,545,533 12	\$7,177,308 74	\$6,570,488 95	\$1,143,609 33	\$1,111,417 63	\$74,237,639 43	\$63,294,438 28
Net earnings.....	\$19,194,277 91	\$16,170,759 52	\$13,748,488 15	\$11,501,123 44	\$4,160,405 63	\$3,358,073 71	\$1,123,605 93	\$1,052,262 97	\$38,226,777 62	\$32,082,269 64
Other income.....	745,181 71	1,015,837 26	1,632,659 55	289,246 48	289,246 48	316,418 82	25,514 38	21,612 09	2,600,809 12	2,989,628 06
Total income.....	\$19,939,459 62	\$17,186,596 78	\$15,381,147 70	\$11,790,370 33	\$4,449,652 11	\$3,674,492 53	\$1,149,120 31	\$1,073,875 06	\$40,827,586 74	\$35,071,897 70
Taxes.....	\$1,676,038 31	\$1,631,890 21	\$896,958 13	\$943,559 23	\$325,000 00	\$280,800 00	\$103,277 56	\$92,384 17	\$3,011,274 00	\$2,948,533 61
Interest and rentals.....	9,475,227 73	8,747,017 39	10,233,813 28	9,881,068 47	2,444,494 34	2,248,734 26	\$80,622 00	\$59,280 70	22,734,147 35	21,427,120 82
Improvements on leased lines.....	37,676 51	21,897 14							37,676 51	21,897 14
Total charges.....	\$11,188,942 55	\$10,400,804 74	\$11,130,771 41	\$10,824,647 70	\$2,779,484 24	\$2,529,534 26	\$683,890 56	\$642,564 87	\$25,783,097 86	\$24,397,551 57
Balance of income.....	\$8,750,517 07	\$6,785,532 04	\$4,158,583 29	\$2,965,722 63	\$1,670,167 77	\$1,144,958 27	\$465,220 75	\$431,310 19	\$15,044,488 88	\$10,674,286 13
Dividends.....	4,116,728 00	4,677,552 50	519,742 12	519,742 12	1,251,622 00	1,107,266 00			5,568,192 12	6,304,560 62
Balance surplus.....	\$4,633,789 07	\$2,108,279 54	\$3,568,841 17	\$1,789,393 51	\$418,545 77	\$37,692 27	\$465,220 75	\$431,310 19	\$9,476,296 76	\$4,369,725 51
Appropriated for special improvement and equipment fund.....		2,108,279 54							42,921 26	2,151,200 80
Balance of surplus carried to profit and loss.....	\$4,633,789 07		\$3,568,841 17	\$1,789,393 51	\$418,545 77	\$37,692 27	\$465,220 75	\$391,388 93	\$9,476,296 76	\$2,218,474 71

By order of the Board of Directors,

ROBERT MATHER, President.

THE ROCK ISLAND COMPANY—BALANCE SHEET, JUNE 30, 1907.	
Assets.	
Stocks owned.....	\$150,014,108 02
Cash.....	21,351 67
Due from companies and individuals.....	244,735 51
Total.....	\$150,280,195 20

Liabilities.	
Capital stock—common.....	\$96,000,000 00
Capital stock—preferred.....	64,000,000 00
Total.....	\$160,000,000 00
Unpaid vouchers and accounts.....	211,147 97
Surplus.....	60,048 13
Total.....	\$160,280,195 20

Profit and Loss.	
Surplus, June 30, 1906.....	\$39,271 75
Income from dividends on Chicago, Rock Island & Pacific Railroad Co. stock owned—	
Received August 1, 1906.....	\$50,000 00
Received April 12, 1907.....	25,000 00
Other income.....	\$75,000 00
Total income.....	\$159,271 75
Expenses and taxes.....	46,561 04
Balance for current fiscal year.....	\$39,075 38
Deduct sundry items not applicable to surplus of current year.....	289 00
Surplus, June 30, 1907.....	\$69,048 13

CHICAGO, ROCK ISLAND & PACIFIC RAILROAD CO.—BALANCE SHEET, JUNE 30, 1907.	
Assets.	
Stock owned.....	\$232,431,390 00
Other investments.....	363,299 81
Cash and cash items.....	843,304 31
Total.....	\$233,637,994 12

Liabilities.	
Capital stock.....	\$145,000,000 00
Funded debt—	
Gold bonds, 4 per cent. (due 2002).....	\$70,067,700 00
Gold bonds, 5 per cent. (due 1913).....	17,364,180 00
Unpaid coupons.....	\$67,090 00
Interest accrued (not due).....	756,513 33
Surplus.....	\$23,003 33
Total.....	\$233,637,994 12

Profit and Loss.	
Surplus, June 30, 1906.....	\$257,286 73
Dividend on the Chicago, Rock Island & Pacific Railway Co. stock owned—	
Two per cent. on 699,384 shares, received October 1, 1906.....	\$1,398,768 00
One per cent. on 700,397 shares, received January 2, 1907.....	700,397 00
One and one-half per cent. on 700,677 shares, received April 1, 1907.....	1,051,015 50
One per cent. on 700,677 shares, received June 30, 1907.....	700,677 00
Other income.....	\$3,550,857 50
Total income.....	\$3,872,417 89
Expenses.....	\$1,579 74
Interest on 4 per cent. bonds.....	2,800,360 00
Interest on five per cent. bonds.....	868,016 67
Balance for current fiscal year.....	\$200,214 06

Balance available for dividends.....	
Dividends to stockholders—	
Paid August 1, 1906.....	\$50,000 00
Paid April 12, 1907.....	25,000 00
Surplus, June 30, 1907.....	\$382,500 79

COMBINED STATEMENT OF PROFIT AND LOSS OF OPERATED LINES AS OF JUNE 30, 1907.

Credit.	
Balance as of June 30, 1906.....	\$23,522,956 88
Surplus for the year ended June 30, 1907, as per combined income account (page 15 of pamphlet report).....	9,476,296 76
Sundry items of profit, not credited to current year's income.....	578,177 52
Sundry liabilities written off and adjustment of accounts.....	100,558 35
Total Credit.....	\$34,078,389 78

Debit.	
Discount on securities sold, stocks and bonds exchanged and expenditures in connection with listing and issuing new bonds.....	\$2,927,756 05
Depreciation on tracks, structures and equipment, removed, sold or destroyed.....	2,861,544 04
Dividends paid out of surplus of prior years.....	2,233,651 90
Reduction in book value of property accounts as explained in detail in reports of operating companies.....	250,000 00
Sundry accounts not charged to current year's income.....	\$24,122 73
Total Debit.....	6,587,084 81
Balance, June 30, 1907.....	\$27,491,304 97

EXTRACTS FROM
ELEVENTH ANNUAL REPORT
OF THE
St. Louis & San Francisco Railroad Co.
For Fiscal Year Ended June 30, 1907.

To the Stockholders:

The Board of Directors herewith submit their report of the operations and affairs of the St. Louis & San Francisco Railroad Company's Lines (exclusive of the Chicago & Eastern Illinois Railroad) for the fiscal year ended June 30, 1907.

The results of operation for the fiscal year were as follows:

Gross earnings (increase, \$6,574,410.95, or 20.5 per cent.)	\$38,621,067 51
Operating expenses (increase, \$4,327,046.24, or 21.1 per cent.)	24,872,579 36
Net earnings (increase, \$2,247,364.71, or 19.5 per cent.)	\$13,748,488 15
Other income	1,540,866 55

Total income	\$15,289,354 70
Taxes	\$896,568 13
Interest, rentals and other fixed charges	10,233,813 28
	\$11,130,771 41

Net income after providing for all charges, being equal to 4 per cent. on the first and second preferred stock (\$21,000,000) and 11.44 per cent. on the common stock (\$29,000,000) \$4,158,583 29

Dividends paid:

Four per cent. on first preferred stock	199,742 12
---	------------

Balance of surplus carried to profit and loss (increase, \$2,169,447.66) \$3,958,841 17

There was a slight decrease in the mileage operated during the fiscal year as compared with the previous year, caused by a remeasurement of line and the taking up of small sections of useless track.

The average mileage operated during the year was 5061.72 miles, as compared with 5068.92 for the preceding year, being a decrease of 7.20 miles.

The total main track mileage operated at June 30, 1907, was 5064.16 miles.

The capital stock of the Company outstanding at the end of the fiscal year was \$50,000,000, being the same as in the preceding year, and is composed of:

\$5,000,000 first preferred.	
16,000,000 second preferred.	
29,000,000 common.	

The total funded debt at June 30, 1906, including that of leased and auxiliary lines, was \$167,440,148 59

The net increase during the fiscal year was \$10,080,153 61

Making the total funded debt at June 30, 1907 \$177,520,302 20

The total amount of equipment bonds and notes outstanding at June 30, 1906, was \$8,078,629 97

The net increase during the fiscal year was \$4,371,569 52

Making the total amount of equipment bonds and notes outstanding at June 30, 1907 \$12,450,199 49

Liberal expenditures were made during the fiscal year for additions and improvements to the property and to its equipment.

The increase in the tonnage carried during the fiscal year was 2,365,162 tons, or 16.64 per cent., and the increase in number of passengers carried was 1,134,353, or 19 per cent.

The earnings from operation per mile of road for the fiscal year were \$730.05, an increase over the preceding year of \$130.34, or 17 per cent., and is the largest revenue per mile of road earned by the Company in any year.

The percentage of all fixed charges and taxes to net income for the fiscal year was 72.8 per cent., as compared with 82.4 per cent. for the preceding year and 93.3 per cent. for the year 1906. This shows a healthy growth in the financial strength of the Company.

ST. LOUIS & SAN FRANCISCO RAILROAD LINES.—INCOME ACCOUNT, FISCAL YEAR ENDED JUNE 30, 1907, COMPARED WITH PREVIOUS YEAR.

	1906-07. 5,061.72	1905-06. 5,068.92	Increase. Amount.	P. ct.	Decrease. Amount.	P. ct.
Average mileage operated						7.20
Earnings:						
Freight	\$36,848,664 91	\$21,955,975 42	\$14,892,689 49	22.3		
Passenger	9,169,400 43	7,908,644 11	1,260,756 32	15.9		
Mail	885,662 71	704,415 22	181,247 49	25.7		
Express	968,864 97	882,232 39	86,632 58	13.2		
Miscellaneous	713,474 49	595,389 42	118,085 07	20.7		
Total	\$38,621,067 51	\$32,046,656 56	\$6,574,410 95	20.5		
Operating Expenses:						
Maintenance of way and structures	\$5,406,107 20	\$4,049,093 65	\$1,357,013 55	33.5		
Maintenance of equipment	4,699,674 36	3,803,210 75	896,463 61	23.6		
Conducting transportation	13,610,703 47	11,742,742 07	1,867,961 40	15.9		
General expenses	1,156,094 33	950,486 65	205,607 68	21.6		
Total	\$24,872,579 36	\$20,545,533 12	\$4,327,046 24	21.1		
Net earnings	\$13,748,488 15	\$11,501,123 44	\$2,247,364 71	19.5		
Other income	1,540,866 55	1,632,659 89	91,793 34	5.6		
Total income	\$15,289,354 70	\$13,133,783 33	\$2,155,571 37	16.4		
Taxes	\$896,568 13	\$943,559 23	\$46,991 10	4.9		
Interest	5,413,637 54	5,178,966 90	\$234,670 64	4.3		
Rentals and sinking fund	3,179,293 74	3,067,329 57	111,964 17	3.6		
Dividends on trust certificates, the Kansas City, Ft. Scott & Memphis Railway	540,400 00	540,400 00				
Dividends on trust certificates, Chicago & Eastern Illinois R. R.	1,094,482 00	1,094,482 00				
Total charges	\$11,130,771 41	\$10,824,647 70	\$306,123 71	2.8		
Available for dividends	\$4,158,583 29	\$2,309,135 63	\$1,849,447 66	80.1		
Dividends:						
Four per cent. on first preferred stock in 1907, and 4 per cent. on first preferred and 2 per cent. on second preferred stock in 1906	199,742 12	519,742 12			\$320,000 00	61.6
Surplus carried to credit of profit and loss	\$3,958,841 17	\$1,789,393 51	\$2,169,447 66	121.2		

ST. LOUIS & SAN FRANCISCO RAILROAD LINES.—GENERAL PROFIT AND LOSS ACCOUNT AND ADJUSTMENTS THEREIN, JUNE 30, 1906, TO JUNE 30, 1907.

Balance at credit, June 30, 1906	\$3,470,978 25
Surplus for the year ended June 30, 1907, as per income account	\$3,958,841 17
Miscellaneous liability accounts written off	32,451 57
Total credit	\$7,462,270 99
Debit:	
Annual instalment from franchises and property account, on account of difference between the cost of underlying bonds refunded and the proceeds of refunding bonds sold, and the commissions paid therefor	\$250,000 00
Discount on securities sold and exchanged, and expenditures in connection with listing, certifying and issuing new bonds	665,906 34
Taxes on land in New Mexico and Arizona, and also expenses in connection therewith (not part of operated property)	10,706 50
Depreciation in value of buildings torn down, tracks taken up and equipment destroyed and dismantled during current fiscal year (balance of cost less salvage charged to operating expenses)	625,247 55
Miscellaneous uncollectible accounts written off	28,368 25
Total debit	\$1,580,228 64
Balance	5,882,042 35
	\$7,462,270 99
By balance at credit, June 30, 1907	\$5,882,042 35

ST. LOUIS AND SAN FRANCISCO RAILROAD LINES (INCLUDING C. & E. I. R. R.).—INCOME ACCOUNT YEAR ENDED JUNE 30, 1907.

	1906-07. 6,009.39	1905-06. 6,016.59	Increase.	Decrease.
Average mileage operated				7.20
Earnings:				
Freight	\$36,168,856 46	\$30,042,568 25	\$6,126,288 21	
Passenger	10,554,248 48	9,511,660 17	1,042,588 31	
Mail and express	2,194,881 52	1,797,578 20	397,303 32	
Miscellaneous	740,796 42	623,412 60	117,383 82	
Total	\$49,568,781 88	\$41,975,219 22	\$7,593,562 66	
Operating Expenses:				
Maintenance of way and structures	\$6,692,721 97	\$4,868,087 00	\$1,824,634 97	
Maintenance of equipment	6,512,224 76	5,255,215 82	1,257,008 94	
Conducting transportation	17,316,988 82	15,701,171 59	1,615,817 23	
General expenses	1,527,952 55	1,231,547 06	296,405 49	
Total	\$32,049,888 10	\$27,116,022 07	\$4,933,866 03	
Net earnings	\$17,508,893 78	\$14,859,197 15	\$2,649,696 63	
Other income	735,631 03	998,952 71	\$263,321 68	
Total net income	\$18,244,524 81	\$15,858,149 86	\$2,386,374 95	
Taxes	\$1,231,958 13	\$1,224,359 23	\$7,598 90	
Interest	7,501,336 11	7,008,328 61	493,007 50	
Rentals and sinking fund	3,542,079 51	3,486,612 12	55,467 39	
Dividends on trust certificates, the K. C., F. S. & M. Ry.	540,400 00	540,400 00		
Dividends on trust certificates, C. & E. I. R. R.	1,094,482 00	1,094,482 00		
Total charges	\$13,910,255 75	\$13,354,181 96	\$556,073 79	
Available for dividends	\$4,734,269 06	\$2,503,967 90	\$2,230,301 16	

Dividends to Stockholders:			
Four per cent. on first preferred stock of St. Louis & San Francisco Railroad Co. in 1907, and 4 per cent. on first preferred and 2 per cent. on second preferred stock in 1906	\$199,742 12	\$519,742 12	\$320,000 00
Six per cent. on preferred stock of the Chicago & Eastern Illinois Railroad Co. to stockholders other than St. Louis & San Francisco Railroad Co.	157,140 00	157,140 00	
Total dividends	\$356,882 12	\$676,882 12	\$320,000 00
Surplus carried to credit of profit and loss	\$4,377,386 94	\$1,827,085 78	\$2,550,301 16

ST. LOUIS & SAN FRANCISCO RAILROAD LINES (INCLUDING C. & E. I. R. R.).—GENERAL PROFIT AND LOSS ACCOUNT AND ADJUSTMENTS THEREIN, JUNE 30, 1906, TO JUNE 30, 1907.

Balance at credit, June 30, 1906	\$5,396,055 45
Surplus for the year ended June 30, 1907	\$4,377,386 94
Premium on general consolidated first mortgage bonds, issued for refunding prior liens, less discount on bonds issued for improvements, which are chargeable against earnings by provision of refunding and improvement mortgage	42,250 00
Miscellaneous liability accounts written off	71,852 37
Total credit	\$9,887,544 76
Debit:	
Annual instalment from franchises and property account on account of differences between the cost of underlying bonds refunded and the proceeds of refunding bonds sold, and the commissions paid therefor	\$250,000 00
Discount on securities sold and exchanged, and expenditures in connection with listing, certifying and issuing new bonds	665,906 34
Taxes on land in New Mexico and Arizona, and also expenditures in connection therewith (not part of operated property)	10,706 50
Depreciation in value of buildings torn down, tracks taken up and equipment destroyed and dismantled during current fiscal year (balance of cost less salvage charged to operating expenses)	1,448,413 96
Miscellaneous uncollectible accounts written off	28,368 25
Total debit	\$2,577,252 19
Balance	7,310,292 57
By balance at credit, June 30, 1907	\$7,310,292 57

ST. LOUIS & SAN FRANCISCO RAILROAD LINES (INCLUDING C. & E. I. R. R.).—CONDENSED GENERAL BALANCE SHEET, JUNE 30, 1907.

Assets.	Amount.	Liabilities.	Amount.
Capital assets:		Capital stock	\$59,188,000 00
Property, franchises and trust assets	\$333,715,929 12	Stock trust certificates	40,872,050 00
Current assets:		Funded debt	215,104,302 20
Cash	\$4,617,429 85	Equipment notes outstanding	21,099,952 99
Due from agents and conductors:			
Debit	\$2,053,836 16		
Credit	26,296 24		
Due from railroad companies account traffic:		Current Liabilities:	
Debit	\$2,136,932 35	Notes payable	\$7,527,250 00
Credit	1,768,765 36	Audited vouchers and payrolls	5,426,557 07
Due from companies and individuals:		Interest and dividends matured	3,225,943 60
Debit	\$2,965,154 71	Interest accrued—not due	1,604,344 87
Credit	58,022 47	Taxes accrued—not due	454,409 85
Due from United States Government	265,007 29		
Loans and bills receivable	79,831 43		
Securities in treasury unpledged—cost of	6,877,284 40	Provisional accounts:	
Securities pledged as collateral under notes payable—cost of	4,751,000 00	Sinking funds, accrued	\$295,042 53
Supplies on hand	3,823,822 94	Insurance, improvement and replacement funds	1,079,139 60
Advances account construction—fundable	2,608,356 09		
Total current assets	\$28,325,571 24	Grand total liabilities	\$356,877,592 71
Deferred assets:			
Open carrying accounts in process of adjustment:			
Debit	\$1,400,635 27		
Credit	694,248 53		
Trustees of sinking funds	\$706,386 74	Profit and loss	7,310,292 57
	439,998 18		
Total assets	\$363,187,885 28	Total	\$363,187,885 28

Note.—In stating the assets and liabilities of the companies covered by this report for the current fiscal year the holdings of the St. Louis & San Francisco Railroad Co. in the bonds and capital stocks of leased and auxiliary lines, have been eliminated.

By order of the Board of Directors.

A. J. DAVIDSON, President.

EXTRACTS FROM
TWENTY-SEVENTH ANNUAL REPORT

The Chicago, Rock Island & Pacific Railway Co.

For Fiscal Year Ended June 30, 1907.

To the Stockholders:

The Board of Directors herewith submit their report of the operations and affairs of the Rock Island Lines for the fiscal year ended June 30, 1907.

The results of the operations for the year were as follows:

Gross earnings (Increase \$9,000,561.86, or 17.6 per cent.)	\$60,338,419 91
Operating expenses (Increase \$5,977,083.47, or 17.0 per cent.)	41,044,142 00
Net earnings (Increase \$3,023,478.39, or 18.7 per cent.)	\$19,194,277 91
Other income	745,181 71

Total income	\$19,939,459 62
Taxes	\$1,676,038 31
Interest	8,279,300 02
Rentals	1,233,604 22

Net income, after providing for all charges, being 11.6 per cent. on capital stock (\$75,000,000)	\$5,750,517 07
Dividends paid (6½ per cent. on capital stock)	4,116,728 00
Surplus for the year (Increase \$2,525,509.53)	\$1,633,789 07

The increase in gross earnings was disposed of as follows:	
Increase in expenditures for maintenance of the property (road and equipment)	\$1,974,568 87
Increase in cost of movement and administration	4,002,514 60
Leaving in net earnings (33.5 per cent. of gross increase)	3,023,478 39

Total increase in gross earnings	\$9,000,561 86
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The property of the St. Louis, Kansas City & Colorado Railroad Co. was taken over for operation on October 1, 1906. The greater portion of the cost thereof was carried last year in the general balance sheet as advances for construction and equipment.

The capital stock of the Chicago, Rock Island & Pacific Railway Co. outstanding at the close of the previous fiscal year was \$74,847,600, and has since been increased by the issue of \$5000 in exchange for a like amount of capital stock of the Burlington, Cedar Rapids & Northern Railway Co.

The amount of capital stock shown on general balance sheet as outstanding June 30, 1907, represents:

Capital stock of the Chicago, Rock Island & Pacific Railway Co., issued and outstanding	\$74,854,100 00
Capital stock of the Burlington, Cedar Rapids & Northern Railway Co. and Rock Island & Peoria Railway Co. outstanding, for the purpose of taking up which there is reserved a like amount of the capital stock of the Chicago, Rock Island & Pacific Railway Co.	145,900 00

Total authorized capital stock of the Chicago, Rock Island & Pacific Rwy Co. \$75,000,000 00

Of the outstanding capital stock of the Burlington, Cedar Rapids & Northern Railway Co. \$5000 is in the treasury of your company. During the year the funded debt increased \$15,880,000, for the details of which reference is made to pages 17 and 20 of pamphlet report.

The cost of property and franchises increased \$18,180,162.06, details being shown on page 18 of pamphlet report. There were also expended \$4,575,221.33 for additions and improvements; for particulars see page 19 of pamphlet report.

The line Fordyce to Crosscut, Ark., 56.55 miles, was put in operation February 1, 1907, and the line Tinsman to Eldorado, Ark., 35.81 miles, on June 23, 1907. These two lines compose what was reported a year ago as the uncompleted portion of the Little Rock & Southern Railroad, now a part of the Rock Island, Arkansas & Louisiana Railroad. That road is laid with 60-pound steel rail and is ballasted with gravel. Standard Rock Island buildings and bridges, including a first-class brick depot at Fordyce, Ark., have been erected. Trackage rights have been obtained over the rails of the Louisiana & Arkansas Railway Co. and the Louisiana Railway & Navigation Co. to carry the line to Alexandria, La., and it is expected that the line from Alexandria to Eunice, La., will be operated in October, 1907. At this latter point connection will be made with the Colorado Southern, New Orleans & Pacific Railroad (Frisco), from Houston, Texas, to New Orleans, La., establishing a new through route of importance to the Rock Island Lines.

The earnings, operating expenses, taxes, interest, etc., of the operated portion of the Rock Island, Arkansas & Louisiana lines were included in the accounts of your company. Legislation by the various States which your lines serve, respecting rates and operating methods of railroads, has been excessive in quantity and severe in character. The Legislatures of five such States have passed laws establishing two cents per mile as the maximum rate of passenger fare, and other laws have been passed by the several States calling for serious reductions in freight rates. Doubtless a large part of this legislation has been due to misconception of the actual conditions. At every opportunity it is the policy of the officers of your company to endeavor to establish better relations with the people of the various States, and to impress upon them the fact that the progress of the section of the country traversed by your road, and the continued prosperity thereof, require candid co-operation between the railroads and the other business interests. The aim of all must be to promote the welfare of the country, and it is to be hoped that when the situation is thoroughly understood a spirit of mutual co-operation will be the result.

ROCK ISLAND LINES—INCOME ACCOUNT, YEAR ENDED JUNE 30, 1907, COMPARED WITH PREVIOUS YEAR.

	1906-07.	1905-06.	Increase.	P. ct.	Decrease.	P. ct.
Average mileage operated	7,780.26	7,218.07	562.19	7.8		
Earnings:						
Freight	\$40,603,972 36	\$34,695,823 88	\$5,968,148 48	17.2		
Passenger	16,449,765 44	13,917,030 64	2,532,734 80	18.2		
Mail	1,356,868 38	1,138,631 15	218,237 23	19.2		
Express	1,373,765 78	1,165,718 22	208,047 56	17.8		
Miscellaneous	391,047 84	330,654 26	60,393 58	18.3		
Total	\$60,238,419 91	\$51,237,858 05	\$9,000,561 86	17.6		
Operating Expenses:						
Maintenance of way and structures	\$8,754,336 55	\$7,302,489 58	\$1,451,846 97	19.9		
Maintenance of equipment	7,184,128 08	6,661,466 18	522,661 90	7.8		
Conducting transportation	23,430,948 42	19,630,076 17	3,799,872 25	19.3		
General expenses	1,684,688 95	1,473,026 60	211,662 35	14.4		
Total	\$41,044,142 00	\$35,067,058 53	\$5,977,083 47	17.0		
Net earnings	\$19,194,277 91	\$16,170,789 52	\$3,023,478 39	18.7		
Other income	745,181 71	1,015,837 26			\$270,655 55	26.6
Total income	\$19,939,459 62	\$17,186,626 78	\$2,752,832 84	16.0		
Taxes	\$1,676,038 31	\$1,631,890 21	\$44,148 10	2.7		
Interest	8,279,300 02	7,748,163 72	531,136 30	6.9		
Rentals	1,195,927 71	998,817 67	197,000 04	19.7		
Improvements on leased lines	37,676 51	21,897 14	15,779 37	72.1		
Total charges	\$11,188,942 55	\$10,400,804 74	\$788,137 81	7.6		
Available for dividends	\$8,750,517 07	\$6,785,832 04	\$1,964,685 03	29.0		
Dividends	4,116,728 00	4,677,552 50			\$560,824 50	12.0
Surplus	\$4,633,789 07	\$2,108,279 54	\$2,525,509 53	119.8		
Appropriated for special improvement and equipment fund		\$2,108,279 54			\$2,108,279 54	100.0
Balance of surplus carried to credit of profit and loss	\$4,633,789 07		\$4,633,789 07			

ROCK ISLAND LINES—DIVIDENDS DECLARED DURING YEAR ENDED JUNE 30, 1907.

Dividend No. 105, 2 per cent., paid October, 1906	\$1,496,908 00
Dividend No. 106, 1 per cent., paid January, 1907	748,530 00
Dividend No. 107, 1½ per cent., paid April, 1907	1,122,750 00
Dividend No. 108, 1 per cent., paid July, 1907	748,530 00
Total	\$4,116,728 00

ROCK ISLAND LINES—PROFIT AND LOSS.

Balance as of June 30, 1906	\$17,202,469 38
Surplus for the year ended June 30, 1907, as per income account above	\$4,633,789 07
Interest prior to October 1, 1906, on advances by the Chicago, Rock Island & Pacific Railway Co. to the St. Louis, Kansas City & Colorado Railroad Co.	\$829,587 75
Interest prior to July 1, 1906, on advances for St. Louis, Mo., freight terminals	67,395 43
Net profit from operation of mines for two years ended June 30, 1907	\$96,983 18
Sundry liabilities written off	29,006 98
Less:	
Discount and expenses in connection with first and refunding mortgage gold bonds issued	\$2,261,849 71
Depreciation on tracks, structures and equipment, removed, sold or destroyed:	
Tracks	\$13,782 55
Structures	42,854 74
Equipment	1,356,532 79
Sundry uncollectible accounts written off	1,413,130 08
	3,088 32
	3,678,068 11
	1,920,654 73

Profit and loss, as of June 30, 1907	\$19,123,124 11
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ROCK ISLAND LINES—CONDENSED GENERAL BALANCE SHEET, JUNE 30, 1907, AND COMPARISON WITH PREVIOUS YEAR.

	1907.	1906.	Increase.	Decrease.
Capital Assets:				
Property and franchises	\$23,498,382 20	\$21,825,639 16	\$2,672,743 04	
St. Louis, Kansas City & Colorado Railroad Co.				
road Co.	16,804,457 58			\$16,804,457 58
Additions and improvements, current year	4,375,221 38	3,492,580 96	882,640 40	
Advances for construction and equipment	4,385,835 57	3,354,913 05	1,030,922 52	
Real estate	639,949 98	431,230 19	208,719 79	
Investment account—stocks representing ownership of Rock Island lines in sundry properties	1,365,168 00	1,136,583 54	228,584 46	
Stock of the Chicago & Alton Railroad Co.	9,005,970 49	9,581,542 87	24,427 62	
Deposit with trustee for purchase of equipment under indenture of February 1, 1907	7,533,550 00		7,533,550 00	
Total	\$371,904,067 62	\$256,626,947 37	\$114,777,120 25	

First and refunding mortgage gold bonds held in the treasury (see contra)	\$11,250,000 00	\$11,250,000 00		
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Current Assets:				
Cash	\$9,917,499 05	\$9,646,668 76	\$270,830 29	
Station agents and conductors	{ Dr. \$2,894,672 96 Cr. 243,612 69			
	2,350,460 27	2,047,194 33	303,265 95	
Companies and individuals	{ Dr. \$2,906,185 72 Cr. 51,504 07			
	2,854,681 65	1,767,937 73	1,086,743 92	
Traffic balances	{ Dr. \$961,472 93 Cr. 869,487 74			
	91,985 19	\$9,208 43	101,193 62	
Express companies	303,135 21	177,614 61	125,520 60	
United States postoffice department	411,369 35	291,245 12	120,124 23	
Advances for construction, equipment, etc., fundable	854,693 62		854,693 62	
Loans and bills receivable	2,217,133 19	999,184 71	1,217,948 48	
Bonds, etc., in treasury—unpledged	10,087,796 80	6,687,518 86	3,400,277 94	
Stocks in treasury—unpledged	910,069 01	1,191,511 45		\$281,442 44
Accrued income from investments	155,496 49	148,228 35	7,268 14	
Prepaid insurance	156,123 37	85,973 67	70,149 70	
Material and supplies	4,356,074 74	2,968,069 18	1,388,005 56	
Total	\$34,666,416 87	\$27,001,908 71	\$7,664,508 16	

Deferred Assets:				
Open carrying accounts in process of adjustment	{ Dr. \$770,356 26 Cr. 117,599 19			
	\$653,357 16	\$187,438 02	\$840,795 18	
East St. Louis & Suburban Railway Co. bonds		49,735 00		\$49,735 00
Total	\$653,357 16	\$137,173 02	\$791,070 18	
Total	\$317,973,841 65	\$294,741,203 06	\$23,232,638 59	

*Denotes credits.				
Capital Liabilities:				
Capital stock	\$75,000,000 00	\$75,000,000 00		
Funded debt	174,332,000 00	164,587,000 00	\$9,745,000 00	
Three-year notes due July 1, 1907	\$7,500,000 00	7,500,000 00		
Collateral trust gold notes due April 1, 1908	6,000,000 00	6,000,000 00		
Equipment trust notes	7,285,000 00	1,250,000 00	6,035,000 00	
Total	\$270,217,000 00	\$254,337,000 00	\$15,880,000 00	

First and refunding mortgage gold bonds issued and held in the treasury (see contra)	\$11,250,000 00	\$11,250,000 00		
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Current Liabilities:				
Purchase money note for Dering Coal Co. stock		\$540,000 00		\$540,000 00
Unpaid vouchers and drafts	\$2,845,601 08	1,433,693 27	\$1,411,907 81	
Unpaid wages	2,556,021 30	2,047,550 92	508,470 38	
Interest, rentals and dividends due July 1	2,788,589 69	2,789,767 37		1,178 37
Taxes accrued (not due)	1,075,398 00	1,039,372 52	36,025 48	
Interest and rentals accrued (not due)	1,342,077 14	1,075,947 63	266,129 51	
Interest coupons due and not presented	212,065 00			
Dividends due and not called for	7,007 07		3,871 82	
Bonds matured, not presented	25,500 00		25,500 00	
Notes payable	150,000 00		150,000 00	
Interim certificates for first and refunding mortgage gold bonds	13,000,000 00		3,000,000 00	
Total	\$14,003,258 59	\$5,926,476 96	\$8,076,781 63	

Deferred Liabilities:				
Keokuk & Des Moines Railway Co.—account equipment	\$197,562 25	\$197,562 25		
White & Black River Valley Railway Co.—account equipment	25,170 00	25,170 00		
C. C. Henderson, trustee	50,000 00			\$50,000 00
Hospital fund (employees)	40,338 61	35,050 30	\$5,288 31	
Total	\$363,070 86	\$307,782 55	\$55,288 31	\$44,711 69

Total liabilities	\$295,733,329 45	\$274,821,269 51	\$20,912,059 94	
Provisional Accounts:				
Equipment replacement funds	\$561,438 27	\$213,415 92	\$348,022 35	
Insurance fund	447,670 28	395,778 71	51,891 57	
Special improvement and equipment fund	2,108,279 54	2,108,279 54		
Total	\$3,117,388 09	\$2,717,474 17	\$399,913 92	

Grand total liabilities (including provisional accounts)	\$298,850,717 54	\$277,538,743 68	\$21,311,973 86	
Profit and loss	19,123,124 11	17,202,469 38	1,920,654 73	
Total	\$317,973,841 65	\$294,741,203 06	\$23,232,638 59	

*Paid July 1, 1907. †Exchanged July 1, 1907, for first and refunding mortgage gold bonds. Note.—In stating the assets and liabilities of the companies forming the Rock Island Lines, the holdings of the Chicago, Rock Island & Pacific Railway Co. in the bonds and capital stock of the auxiliary lines, together with loans between the various companies, have been eliminated from the liabilities and a like reduction made in the book value of the assets. The figures shown, therefore, represent the book value of the assets and the liabilities without duplication.

The classification of some of the items in the general balance sheet has been changed during the past year. To preserve comparisons the figures for last year have been restated to agree with the classification of the 1907 figures. Hence the 1906 figures do not agree in every detail with those published in the annual report for the previous year.

By order of the Board of Directors,

B. L. WINCHELL, President.

LOUISVILLE & NASHVILLE RAILROAD COMPANY.

Louisville, Ky., October 2, 1907.

To the Stockholders of the Louisville & Nashville Railroad Co.:

The Board of Directors of your Company respectfully submits the following report for the fiscal year ended June 30, 1907:

I. Lines Owned and Operated:		MILEAGE.
(1) Owned.....	3,358.07	Miles.
(2) Operated, but not owned:		
(a) Operated as owner of entire Capital Stock.....	447.04	
(b) Operated under lease.....	119.24	
(c) Operated for account of owners.....	214.32	
(d) Operated under trackage arrangements.....	203.89	
	984.49	
Total operated.....	4,342.56	
Average mileage operated during the year 4306.33.		

II. Lines Operated Under Their Separate Organizations in Which This Company Owns a Majority of the Capital Stock or Is Interested as Joint Owner or Lessee:

Nashville, Chattanooga & St. Louis Railway, less mileage used by L. & N. Railroad under trackage arrangements (a majority of the Capital Stock owned).....	925.44
Central Transfer Railway & Storage Co., Louisville (one-half of the Capital Stock owned).....	.67
Georgia Railroad and Dependencies (interested as joint lessee).....	571.00
Chicago, Indianapolis & Louisville Railway (a majority of the Capital Stock owned jointly with the Southern Railway).....	599.76
Louisville, Henderson & St. Louis Railway, less mileage of Louisville & Nashville Railroad operated under trackage arrangements (a majority of the Capital Stock owned).....	181.70
	2,278.57
III. Lines Owned by This Company, but Operated by Other Companies:	
Paducah & Memphis Division (leased to Nash., Chatt. & St. L. Rwy. at 5 per cent. on cost of road).....	254.20
Less—Mileage used by this company under trackage arrangements.....	5.46
	248.74
Clarksville & Princeton Branch—Gracey, Ky., to Princeton, Ky. (leased to Ohio Valley Railway Co. at \$12,039.70 per annum).....	20.70
	269.44
Total mileage.....	6,890.57
Total mileage June 30, 1906.....	6,841.82
Increase.....	48.75

Accounted for as follows:

Additions:	
Morganfield Branch.....	25.33
Other additional lines and extensions operated.....	39.56
Additions to lines controlled, not operated.....	11.66
	76.55
Deductions:	
Birmingham Southern Railroad.....	26.24
Sundry net deductions.....	1.56
	27.80
	48.75

BONDED DEBT (INCLUDING COLLATERAL TRUST BONDS).

Bonded Debt, June 30, 1906, total issue.....	\$174,501.500
Total thereof outstanding in hands of public June 30, 1906, \$129,262.500.	
Bonds Issued:	
Unified 50-year 4 per cent. Gold.....	\$1,141,000
Atlanta, Knoxville & Cincinnati Division 4 per cent. Gold.....	5,000
Paducah & Memphis Division 50-year First Mortgage Gold.....	57,000
	\$1,203,000
Bonds Assumed Through Consolidation:	
The Gallatin & Scottsville Railway First Mortgage.....	309,000
	\$1,512,000
Less Redeemed for Sinking Funds:	
Evansville, Henderson & Nashville Division Gold.....	\$74,000
General Mortgage Gold.....	427,000
Cecilia Branch.....	67,000
Pensacola & Atlantic Railroad First Mortgage Gold.....	67,000
Pensacola Division First Mortgage Gold.....	21,000
	5,000
Matured:	
Maysville & Lexington North Division 7 per cent.....	5,000
	661,000
Net increase from last year.....	\$51,000
Bonded Debt, June 30, 1907, total issue.....	\$175,752.500
Less owned (see page 24 of pamphlet report):	
In Treasury.....	\$15,385,000
Deposited in Trusts as Collateral.....	30,398,000
Held in Sinking Funds.....	1,328,000
	47,121,000
Total Outstanding Bonded Debt in hands of public June 30, 1907.....	\$128,631,500
Total Outstanding Bonded Debt in hands of public June 30, 1906.....	129,262,500
Total Decrease of Bonds outstanding in hands of public.....	\$631,000
Accounted for as follows:	
Bonds Redeemed and Purchased for Sinking Funds During the Year:	
Evansville, Henderson & Nashville Mortgage.....	\$74,000
General Mortgage.....	425,000
Cecilia Branch Mortgage.....	67,000
Pensacola Division First Mortgage.....	21,000
Southeast & St. Louis Second Mortgage.....	1,000
L. & N. R. R. Co. 6 per cent. Sinking Fund Mortgage.....	10,000
Henderson Bridge Co. First Mortgage.....	40,000
Maysville & Lexington North Division Mortgage.....	5,000
	\$643,000
Less Bonds Sold:	
Louisville & Nashville-Southern, Monon Collateral, Joint.....	12,000
Total decrease.....	\$631,000
*Includes \$82,000 of bonds matured or drawn for payment not presented.	
†This does not include \$6,500,000 Three-year 5 per cent. Unsecured Gold Notes of this Company sold during year.	

GENERAL RESULTS.

The General Results for the year, as given in detail in Table No. 1, are here summarized:

Gross Earnings.....	\$48,263,945 20
Less Operating Expenses, 74.14 per cent.....	35,781,302 54
Net Earnings from Traffic, 25.86 per cent.....	\$12,482,642 66

Other Income:	
From Rents.....	\$569,025 91
From Investments.....	810,131 14
From Various Sources.....	192,597 99
	1,561,755 04
	\$14,044,397 70

Deductions from Income:	
Interest on Bonded Debt.....	\$5,934,597 67
Rent and Taxes.....	1,365,253 70
Sinking Funds.....	241,084 17
South & North Alabama R. R. Surplus (included in above).....	52,940 26
	7,593,875 80

Net Income for the year.....	\$6,450,521 90
Out of which the following dividends have been declared:	
Dividend No. 55, declared December 20, 1906, payable February 11, 1907, 3 per cent., cash.....	\$1,800,000 00
Dividend No. 56, declared June 20, 1907, payable August 12, 1907, 3 per cent., cash.....	1,800,000 00
	3,600,000 00

Leaving surplus carried to Profit and Loss Account of.....\$2,850,521 90

The balance to credit of Profit and Loss Account as of June 30, 1907, amounts to \$30,827,512.88. For details see Table No. II.

GROWTH OF TRAFFIC.

The growth of traffic for the past ten years is shown by the following table:

Years.	Average miles operated.	Gross earnings.	Operating expenses.	Net earnings.
1897-1898.....	2,988.00	\$21,996,652 83	\$14,921,730 14	\$7,074,922 68
1898-1899.....	2,988.16	\$23,759,485 69	\$15,731,587 68	\$8,027,898 01
1899-1900.....	3,007.35	\$27,742,378 89	\$18,603,406 02	\$9,138,972 87
1900-1901.....	3,169.27	\$28,022,296 80	\$18,233,033 50	\$9,789,263 30
1901-1902.....	3,326.76	\$30,712,257 37	\$20,992,437 64	\$9,899,819 73
1902-1903.....	3,438.93	\$35,449,377 84	\$23,970,812 44	\$11,478,565 40
1903-1904.....	3,618.19	\$36,943,792 73	\$25,141,548 27	\$11,802,244 46
1904-1905.....	3,826.31	\$38,517,070 72	\$26,490,020 97	\$12,027,049 75
1905-1906.....	4,130.91	\$43,008,996 23	\$30,933,463 71	\$12,075,532 52
1906-1907.....	4,306.33	\$48,263,945 20	\$35,781,302 54	\$12,482,642 66

Years.	Gross earnings per mile.	Operating expenses per mile.	Net earnings per mile.	Percentage of expenses to earnings.
1897-1898.....	\$7.361 66	\$4.993 88	\$2.367 78	67.84
1898-1899.....	\$7.951 21	\$5.264 64	\$2.686 57	66.21
1899-1900.....	\$9.224 85	\$6.185 97	\$3,038 88	67.06
1900-1901.....	\$8.841 84	\$5.753 07	\$3,088 77	65.07
1901-1902.....	\$9.231 91	\$6.283 14	\$2,948 77	68.06
1902-1903.....	\$10.308 26	\$6.970 43	\$3,337 83	67.62
1903-1904.....	\$10.210 57	\$6.948 65	\$3,261 92	68.06
1904-1905.....	\$10.666 37	\$6.923 12	\$3,743 25	65.77
1905-1906.....	\$10.411 50	\$7.488 29	\$2,923 21	71.82
1906-1907.....	\$11.207 67	\$8.399 00	\$2,808 67	74.14

*Freight on Company's property included.

CINCINNATI-ATLANTA LINE.

The reduction of grades between Corbin and Saxton, Ky., has been completed and work commenced on the reduction of grades and construction of double track between Corbin and Livingston. The completion of this work will give the Company double track between Sinks and Corbin, a distance of about 35 miles, together with maximum grades of .05 per cent. compensated for curvature in both directions, between Sinks and Saxton, with the exception of one grade 4.10 miles long opposed to southbound traffic, between Hazel Patch and East Bernstadt, which will be operated as a "Pusher Grade."

THE GALLATIN & SCOTTSVILLE RAILWAY.

A company was organized under the name of "The Gallatin & Scottsville Railway," which purchased the property and franchises of the roads formerly known as the Chesapeake & Nashville Railway and the Middle & East Tennessee Central Railway. Bonds of the Gallatin & Scottsville Railway were issued and are held in the Treasury, amounting to \$300,000, covering the cost of the property as of July 1, 1906. The property, rights and franchises of this company were conveyed to the Louisville & Nashville Railroad Co. by deed dated January 18, 1907.

As indicated in the previous year's report, the roads have been operated as part of the L. & N. System from July 1, 1906.

MORGANFIELD & ATLANTA RAILROAD.

This railroad, extending from Providence, Ky., to Morganfield, Ky., a distance of 25.33 miles, the entire capital stock of which is owned by this Company, was completed and placed in operation as part of the L. & N. System on April 1, 1907. Bonds will be issued and delivered to the L. & N. R. R. Co. to reimburse it for cost of construction.

SALE OF BIRMINGHAM SOUTHERN RAILROAD.

This Company and the Southern Railway Co., being owners of one-half each of the capital stock of the Birmingham Southern Railroad, sold it on July 1, 1906, to the Tennessee Coal, Iron & Railroad Co. In this sale the line from Woodstock to Blocton was excepted, and a company, organized under the name of the "Woodstock & Blocton Railway," took title thereto, and the stock in this company was retained, one-half each, by the L. & N. Railroad and the Southern Railway, the operation of the road to continue as heretofore by the Louisville & Nashville Railroad Co. and the Alabama Great Southern Railroad Co. under trackage arrangements.

NEW GENERAL OFFICE BUILDING.

The new general office building, an eleven-story fireproof structure, was completed during the year, and has been occupied by the officers and employees since January, 1907.

INCREASE IN OPERATING EXPENSES.

The continued increased cost of labor and materials and the necessity for employing a much larger force to enable the Company to promptly handle the

Increase in business, the unusual repairs made necessary on account of the heavy damages inflicted on the Company's property by the severe storm along the Gulf Coast, which occurred in September, 1906, will explain in a great measure the increase in Operating Expenses.

SALE OF LOUISVILLE & NASHVILLE RAILROAD COMPANY THREE-YEAR FIVE PER CENT. GOLD NOTES.

In February last the Directors of your Company deemed it advisable to place the Company in funds so that it could complete the construction work and improvements under way and authorized, as well as to place the Company in a strong financial position, and, as it was unable to dispose of any of its treasury bonds to advantage, on account of there being no demand whatever for railroad bonds of any character, they deemed it advisable to issue and sell \$6,500,000 of the Company's Three-Year 5 per cent. Gold Notes, to bear interest from March 1, 1907. The notes were disposed of at 96½, less 1 per cent. commission, thus netting to the Company \$6,207,500, the discount on the same being charged to Profit and Loss.

Attention is called to the report of the Comptroller for the details of the year's business.

The Board acknowledges the fidelity and efficiency with which the officers and employees of the Company have served its interests.

For the Board of Directors,

H. WALTERS,

Chairman.

M. H. SMITH,

President.

REPORT OF THE COMPTROLLER.

TABLE No. 1.—INCOME ACCOUNT.

Income from Traffic:	
Earnings:	
From freight traffic.....	\$35,235,787 02
From passenger traffic.....	10,417,469 58
From transportation of mails.....	883,433 72
From express traffic.....	1,078,690 84
From miscellaneous sources.....	648,654 04
Total earnings.....	\$48,263,945 20
Expenses:	
For maintenance of way and structures.....	\$8,065,898 45
For maintenance of equipment.....	8,709,610 25
For conducting transportation—traffic.....	963,236 61
For conducting transportation—operation.....	17,009,121 19
For general expenses.....	1,033,445 74
Total operating expenses, 74.14 per cent.....	35,781,302 54
Net earnings from traffic, 25.86 per cent.....	\$12,482,642 66
Income from Rents:	
Clarksville & Princeton Division.....	\$12,030 70
Paducah & Memphis Division.....	396,363 65
St. Louis Property.....	18,629 47
Equipment.....	275,943 56
Various Sources.....	46,049 53
	\$559,025 91
Income from Investments:	
Louisville & Nashville Terminal Co., Interest on Bonds.....	\$101,359 35
Chicago, Indianapolis & Louisville Railway Stock.....	224,571 50
Jackson Lumber Co. Bonds.....	30,166 67
Nashville, Chattanooga & St. Louis Railway Stock.....	394,768 00
Charleston Terminal Co. Bonds.....	12,000 00
Sundry Bonds and Stocks.....	47,265 62
	\$101,131 14
Interest from Various Sources.....	192,597 99
	1,561,755 04
From which Deduct:	\$14,044,397 70
Charges against Income:	
Interest on bonded debt.....	\$5,934,597 67
Rents paid for lease of Roads:	
Guaranteed dividend on Nashville & Decatur Railroad Stock.....	\$118,061 25
Rents of other roads.....	38,581 58
	156,642 83
Taxes.....	1,206,610 87
	\$7,299,851 37
Sinking Fund Charges:	
Direct payments for which no bonds are received.....	\$122,100 00
Accrued Premiums on Bonds drawn for Sinking Funds.....	51,100 00
Accrued interest on Company's Bonds in Sinking Fund.....	67,884 17
	\$241,084 17
South & North Alabama Railroad Co. surplus for year included in above.....	52,910 26
	294,024 43
	7,593,875 80
Net income for the year.....	\$6,450,521 90
Less:	
Cash dividend, 3 per cent., payable February 11, 1907.....	\$1,800,000 00
Cash dividend, 3 per cent., payable August 12, 1907.....	1,800,000 00
	3,600,000 00
Surplus after payment of dividends, transferred to the credit of Profit and Loss Account.....	\$2,850,521 90

TABLE No. 11.—PROFIT AND LOSS ACCOUNT.

Credits.	
Balance to the credit of this account June 30, 1906.....	\$18,130,045 82
Sinking Fund Payments for which no bonds are received, charged to Income Account.....	122,100 00
Interest accrued on Company's Bonds in Sinking Funds.....	67,884 17
Refunded by Pullman Company for excess mileage paid on sleeping cars prior to June 30, 1906.....	48,282 08
Sale of lands in State of Alabama.....	10,824 64
Unpaid amounts on Audited Payrolls and Vouchers prior to July 1, 1906, closed off. Amount of consideration for lots sold in Pensacola, Fla. (Cost charged to Profit and Loss Account when purchased).....	17,763 94
Sundry credits and amounts realized from various sources.....	3,000 40
Net surplus from operation for year ended June 30, 1907, transferred from Income Account.....	10,335 48
	2,850,521 90
	\$21,290,758 03

Debits.

Premium on bonds redeemed for Sinking Funds.....	\$8,300 00
Bonds purchased by Trustee of Sinking Funds brought to par on ledger.....	1,004 33
Taxes for prior years paid this year.....	4,284 28
Amount of this Company's proportion of deficit from operation of Georgia Railroad Lease.....	13,975 05
Discount on obligations sold during the year:	
L. & N. Sou. Monon Collateral 4 per cent. Joint Bonds.....	\$906 66
Three-year 5 per cent. Gold Notes.....	292,500 00
	293,406 66
Reserve for depreciation of mine tracks.....	100,000 00
Sundry debits from various sources.....	7,275 83
Balance to credit of Profit and Loss Account June 30, 1907.....	30,827,512 88
	\$21,290,758 03

TABLE No. 11.—GENERAL BALANCE SHEET.

Assets, etc.	
Cost of Road, Equipment, etc. (Table VI, page 26, pamphlet report).....	\$106,667,128 94
Real Estate, Quarry and Timber Lands.....	1,038,815 06
Improvements and Betterments.....	3,469,784 95
Investments (Table V, pages 24 and 25, pamphlet report):	
Bonds of Other Companies:	
In Treasury.....	\$3,485,067 41
In Trusts and Sinking Funds.....	10,237,000 00
	\$13,722,067 41
Stocks of Other Companies:	
In Treasury.....	\$4,364,688 72
In Trusts.....	11,612,305 85
	15,976,994 57
Advances to Subsidiary Companies.....	29,729,051 98
Material and Supplies.....	4,688,718 29
Material in Private Sidings.....	5,696,435 72
Uninvested Sinking Funds and Deposits with Mortgage Trustees.....	805,490 96
	35,882 96
Current Assets:	
Cash on hand.....	\$3,728,221 72
Cash on special deposit.....	4,352,890 00
Cash on deposit to pay coupons and dividends.....	114,080 23
Cash on deposit to pay matured bonds.....	6,000 00
	\$8,201,191 95
Remittances in transit.....	654,899 29
Due from agents and conductors.....	1,383,885 82
Traffic balances due from other companies.....	340,703 43
Bills receivable, less reserve for doubtful notes.....	778,785 00
Accounts receivable, less reserve for doubtful accounts.....	2,542,141 76
	13,901,677 25
Accounts Awaiting Distribution.....	683,286 79
Unadjusted Claims, less Reserve for this Company's Proportions.....	37,510 45
Contingent Assets:	
South & North Alabama Railroad Co. 5 per cent. consolidated Gold bonds outstanding endorsed by Louisville & Nashville Railroad Co.....	3,247,000 00
Bills payable—Endorsed by Louisville & Nashville Railroad Co.....	7,000 00
	3,254,000 00
	\$29,987,712 45
Liabilities, etc.	
Capital Stock:	
Full shares outstanding.....	\$59,916,500 00
Fractional shares outstanding.....	720 00
Original stock and subsequent stock dividends unissued.....	82,780 00
	\$60,000,000 00
Bonded Debt Outstanding (Table IV, page 22, pamphlet report).....	128,549,500 00
Bills Payable—Three-year 5 per cent. Gold Notes, due March 1, 1910 (unsecured).....	6,500,000 00
Current Liabilities:	
Bonds due and unpaid (Table IV, page 23, pamphlet report).....	82,000 00
Agents' drafts.....	250,142 38
Payrolls:	
June, 1907, audit unpaid.....	\$2,152,636 72
May, 1907, and prior audits unpaid.....	183,225 29
	2,335,861 92
Vouchers and accounts payable.....	2,309,232 90
Interest and rental due and unpaid.....	1,314,339 47
Interest and rental accrued, but not due.....	824,456 67
Interest accrued, but not due on three-year gold notes.....	108,333 33
Dividends due and unpaid.....	50,638 10
Dividends payable August 12, 1907.....	1,800,000 00
Taxes accrued, but not paid.....	632,384 46
Unrepresented mileage and excess baggage coupons.....	147,150 42
Traffic balances due to other companies.....	545,946 90
Other accounts accrued.....	6,400 00
	10,468,896 55
Reserve Account:	
Balance unexpended (see page 13, pamphlet report).....	\$83,785 31
For doubtful accounts (in excess of amounts specifically applied on Asset side).....	6,017 71
	89,803 02
Reserve Account—Depreciation of Mine Tracks—amount unexpended (see page 13, pamphlet report).....	300,000 00
Contingent Liabilities:	
South & North Alabama Railroad Co. 5 per cent. consolidated Gold bonds outstanding endorsed by Louisville & Nashville Railroad Co.....	\$3,247,000 00
Bills payable—Endorsed by Louisville & Nashville Railroad Co.....	7,000 00
	3,254,000 00
Profit and Loss:	
Excess of assets over liabilities.....	20,877,512 88
	\$29,987,712 45

TABLE No. VIII.—GROSS EARNINGS, OPERATING EXPENSES, AND NET.

Sources.	Per cent. of gross earnings.	Gross earnings.	Operating expenses.	Net earnings.
Passenger.....	21.54	\$10,417,469 58		
Mail.....	1.80	883,433 72		
Express.....	2.25	1,078,690 84		
Train privileges.....	.042	19,322 48		
		\$12,399,326 62	\$8,728,558 41	\$3,670,768 21
Freight.....	73.006	35,235,787 02	27,062,744 13	8,183,042 89
Telegraph.....	.013	6,215 91		6,215 91
Car detention, storage, etc.....	.350	120,728 13		120,728 13
Rents.....	.842	406,206 96		406,206 96
Switching.....	.006	12,764 71		12,764 71
Miscellaneous.....	.056	25,521 63		25,521 63
Creosote works, West Pascagoula.....	.064	31,141 81		31,141 81
Net proceeds account shipments of slag.....	.062	24,563 41		24,563 41
Total.....	100.000	\$48,263,945 20	\$35,781,302 54	\$12,482,642 66

[Continued from Page 72.]

Washington Mills (Va.) Pfd.....	100	115
Whitney Mfg. Co. (S. C.).....	150	135
Wiscasset Mills (N. C.).....	127	135
Woodruff Cotton Mills (S. C.).....	127	133

New Corporations.

The Farmers' Bank of Naylor, Ga., is being organized with \$25,000 capital by prominent farmers of that section.

A State bank with \$50,000 capital is reported being organized at Weston, W. Va., by Walter A. Edwards and others.

The Farmers' Bank of Chilhowie, Mo., capital \$10,000, has been incorporated by F. M. Gray, C. H. Gaines, Paul McElwee and others.

The Commercial Bank of Vandalia, Mo., has been incorporated with \$30,000 capital by S. D. Ely, J. H. Culwell, W. W. Bland and others.

The Bank of Sturgis has been incorporated at Sturgis, Miss., with \$10,000 capital by D. L. Hunt, H. W. Daniel, D. E. Rainey and others.

The Citizens' Bank of Greenville, Mo., has been incorporated with \$10,000 capital by C. M. Rhodes, U. W. McGee, Fannie R. Malugen and others.

The Farmers' Bank of Tarkio, Mo., has been incorporated with \$20,000 capital by Nellie Curfman, George S. Luckhardt, J. A. Postlewaite and others.

The First National Bank of Florala, Ala., capital \$50,000, has organized with H. G. Malone, president; J. E. Hughes, vice-president, and J. J. Morris, cashier.

The Jefferson County Bank at Wadley, Ga., has been chartered with \$25,000 capital by John D. Walker of Hancock county, R. L. Perkins of Wadley and others.

The Lamar Investment Co. of Fort Worth, Texas, has been incorporated with \$25,000 capital by E. G. Hall, Miss Blanche Schrecongost and Walter Bywaters.

The Bank of Brooks at Brooks, Ga., capital \$25,000, has begun business. The officers are J. F. Lewis, president; R. P. Minter, vice-president, and E. J. Snead, cashier.

The Flat Creek Savings Bank & Trust Co. is reported chartered at Flat Creek, Tenn., by J. B. and G. F. Shofner, W. L. Crigler, J. W. Frost and J. E. Bryant of Flat Creek.

The First National Bank of Blair, O. T., has been approved; capital \$25,000. The organizers are Charles A. Huber, S. P. G. Lewis, Anton Huber, Fred Huber and Joseph Huber.

The Security Bank of Ravenden Springs, Ark., has been incorporated with \$5000 capital by B. E. Pickett, president; J. B. Hatch, vice-president; J. L. Witt, secretary and treasurer.

The Exchange Bank of Stillmore, Ga., has filed a charter; capital \$25,000. The organizers are George M. Brinson and W. R. Holder of Stillmore as president and cashier, respectively.

The Planters and Merchants' Bank of Brundidge, Ala., has opened for business with \$30,000 capital. J. M. Walters is president; Fox Henderson, vice-president, and W. H. Black, cashier.

The Wharton Bank & Trust Co. of Wharton, Texas, has been incorporated with \$50,000 capital by G. C. Clifford, P. A. Murray, R. B. Huston, William Hood, P. G. Brooks and J. Rust.

The Gaylesville Bank at Gaylesville, Ala., has filed articles of incorporation; capital \$12,500. A. B. Russell is president; J. Robert Henderson, vice-president, and Webb Chesnut, cashier.

The First State Bank & Trust Co. of Snyder, Texas, capital \$50,000, has been incorporated by H. B. Patterson, T. F. Baker, W. W. Nelson, J. E. Nelson, J. E. Dodson, C. F. Harkey and others.

The Ochiltree National Bank at Ochiltree, Texas, has been granted a charter;

capital \$25,000. The officers are G. M. Perry, president; James D. Hamlin, vice-president; James D. Wyman, cashier.

The Bank of Auburn at Auburn, Ga., has been granted a charter; capital \$25,000. The organizers are W. H. Toole of Winder; T. C. Flanagan, John Hutchens, J. H. Hutchens and others of Gwinnett county.

The Realty & Securities Co. of Hendersonville, N. C., has been granted a charter; capital \$5000. The organizers are John F. Rowland, Chas. A. Hobbs, Wm. Redin Kirk, Clarence F. White and C. E. Van Bibbet.

The First State Bank of Streetman, Texas, has been chartered with \$10,000 capital. The directors are W. E. Richards, Houston; S. F. Alford, J. N. Jenkins, B. D. Burleson and J. E. Grayson of Streetman.

The Ellis County Bank of Arnett, O. T., has been granted a charter; capital \$10,000. The incorporators are C. L. Johnson of Gage, J. O. Ralston and J. S. Fowler of Arnett, O. E. Null and M. T. Wood of Grand.

The People's Bank of Summerland at Summerland, Miss., capital \$10,000, has been incorporated by D. V. Edwards, J. R. Anderson, F. M. Barfield and others of Summerland, W. E. Coleman, Weathersby, and W. J. Rice, Jackson.

The People's Bank of Weakley county has been incorporated at Dresden, Tenn., with \$100,000 capital by T. H. Farmer, E. N. Lovelace, G. E. Farmer, H. H. Lovelace, L. G. McMillin, J. A. Bradberry, T. L. Turner, J. C. Turbeville and J. H. Elder.

The Southern Savings & Investment Co. of Columbia, S. C., capital \$5000, has organized with the following directors: F. H. Weston, president; Willie Jones, vice-president, and J. E. Poore, secretary and treasurer; W. T. Aycock and J. P. Matthews.

The Paige State Bank at Paige, Texas, recently incorporated with \$10,000 capital, will, it is stated, soon begin business with E. F. Brown of Houston, president; Albert Orts, Sr., vice-president; William Hamff, secretary; M. K. Freeman of Mason, cashier.

The Salyersville National Bank at Salyersville, Ky., capital \$25,000, has been authorized to begin business with Jeff Prater, president; George Carpenter, vice-president; E. L. Stephens, cashier; W. R. May, assistant cashier. This is a conversion of the Salyersville Bank.

The People's Bank of Mansfield, Ark., has been granted a charter; capital \$25,000. The incorporators are J. M. Marshall, president; J. W. Sorrels, vice-president; W. S. Willis, secretary and treasurer; T. P. Edwards, John Smedley, N. B. Miller and others.

The Co-operative Bank & Trust Co. of Oklahoma City, O. T., recently incorporated with an authorized capital of \$1,000,000, will, it is reported, soon begin business. The organizers are W. J. Clark, Okarche, O. T.; Cephus Miller, Seward, O. T.; B. C. Hansen, Shawnee, O. T.; E. A. Bowerman, Shawnee, O. T., and J. L. Vaughn, Krebs, I. T.

The MANUFACTURERS' RECORD is informed that the Citizens' National Bank of Anderson is the name of the new financial institution being organized at Anderson, S. C., with D. P. McBrayer as president. The bank will have \$100,000 capital. A press report states that the bank has been approved by the Comptroller of the Currency, and that the organizers are D. P. McBrayer, W. J. McClure, R. A. Lewis, W. W. Thompson, J. M. Richardson and J. F. Shumate.

The Alabama National Life Insurance Co. has been organized at Birmingham, Ala., with \$400,000 capital. The directors

are A. D. Smith, Birmingham, president; J. T. Palmer, Birmingham, and S. V. Woodfin, Marion, vice-presidents; A. F. Armstrong, Marion, secretary; Edward Brand, Birmingham, assistant secretary; E. F. Enslen, treasurer; Dr. J. D. Heacock, medical director; J. S. Pinckard, Montgomery; Massey Wilson, Montgomery; J. L. Glenn, Birmingham; R. G. Hewitt, Birmingham; W. E. Erquhart, Birmingham; S. E. Stewart, Hartselle, Ala.; J. S. Gillespy, Birmingham; J. F. Webb, Birmingham; R. C. Bacus, Birmingham; G. W. Beach, Birmingham; J. S. Palmer, Birmingham; N. G. Davis, Mobile; W. H. Smith, Birmingham; Roscoe McConnell, Birmingham, and J. L. Yancey, Birmingham.

New Securities.

Albemarle, N. C.—Stanley county is reported to have sold \$100,000 of 5 per cent. refunding railroad bonds.

Alpine, Texas.—Bids will be received until November 18 by J. D. Jackson, clerk of the Board of Education, for \$20,000 of 5 per cent. 40-year school bonds.

Asheville, N. C.—On October 29 an election is to be held in Buncombe county to decide the question of issuing \$200,000 of bonds in aid of the Appalachian Interurban Transcontinental Company.

Bay City, Texas.—Reports state that an election is to be held in Matagorda county October 16 to vote on drainage and levee bonds.

Beaumont, Texas.—Bids will be received until 10 A. M. October 21 by Jas. A. Harrison, county judge, for \$300,000 of 5 per cent. 20-40-year Jefferson county road bonds.

Blackshear, Ga.—The city is reported to have under consideration an issue of \$50,000 of sewer and other improvement bonds.

Brunswick, Ga.—Reports state that an election will probably be held to vote on \$75,000 of street-paving bonds.

California, Mo.—The \$50,000 of 5 per cent. 10-20-year water-works bonds have been purchased at a premium by the Little & Hays Investment Co. of St. Louis.

Canton, Miss.—John Nuveen & Co. of Chicago are reported to have recently purchased \$50,000 of 5 per cent. sewer bonds.

Cedar Hill, Texas.—Bids will be received until October 21 by the Board of Education for \$10,000 of 5 per cent. 10-40 year independent school district bonds.

Centerville, Ala.—This city recently authorized an issue of school bonds.

Clinton, O. T.—Reports state that \$11,000 of school bonds were recently voted.

Corsicana, Texas.—The Attorney-General has approved \$15,000 of 4 per cent. 15-40-year school bonds.

Covington, Ga.—The city has voted \$55,000 of water-works and sewerage and \$5000 of school bonds.

Edina, Mo.—This district will, it is reported, vote October 15 on \$1000 of bonds to furnish high school.

El Reno, O. T.—No sale was made of the \$25,000 of 5 per cent. 10-20-year sewer bonds offered October 1. L. G. Adams is City Clerk.

Enid, O. T.—The city recently voted \$285,000 of sewer, \$10,000 septic plant, \$55,000 funding, \$25,000 of fire department and \$15,000 of water extension bonds.

Eupora, Miss.—The Eupora Bank has been awarded at par \$10,000 of 6 per cent. 20-year schoolhouse bonds. J. G. Felton is Mayor.

Galveston, Texas.—Resolutions are reported adopted by the Galveston County Commissioners to issue the \$500,000 of causeway bonds voted last May.

Graham, Texas.—The State is reported to have purchased \$9000 of 5 per cent. water-works bonds.

Greensboro, N. C.—The city has voted \$125,000 of bonds to pay off floating indebtedness.

Greenville, N. C.—The city will receive bids until November 4 for \$75,000 of bonds; \$25,000 to be used for municipal improvements and \$50,000 for the Eastern Carolina Teachers' Training School.

Gulfport, Miss.—The city will sell immediately, it is reported, \$22,000 of school bonds.

Hampton, Va.—An election is to be held in Elizabeth City county on November 5 to vote on \$20,000 of Hampton Creek bridge-construction bonds.

Handley, Texas.—On November 2 this district will vote on \$15,000 of school-building bonds.

Haskell, Texas.—The Attorney-General has approved \$10,000 of 5 per cent. 10-40-year schoolhouse bonds.

Houlka, Miss.—An issue of \$7000 of 6 per cent. school-building bonds are being offered for sale. O. M. Harrill is acting Town Clerk.

Houston Heights, Texas.—An ordinance is to be introduced in the City Council, it is stated, asking that an election be held to vote on about \$20,000 of bonds for additional school buildings.

Jennings, La.—No satisfactory bids were received August 15 for the \$40,000 of 5 per cent. 30-40-year school bonds.

Lebanon, Tenn.—The Commercial Club has adopted a resolution that application be made to the Mayor and Board of Aldermen asking that an election be held to vote on \$10,000 of water-works bonds.

Lindsay, I. T.—The city has voted \$25,000 of water-works bonds.

Loraine, Texas.—Reports state that \$10,000 of 5 per cent. 5-20-year independent school district bonds were recently purchased by the State Board of Education.

Lumberton, N. C.—The \$50,000 of 5½ per cent. 30-year Robeson county courthouse bonds were awarded to the Security Trust Co. of Spartanburg, S. C., at a premium of \$4189.75.

Madison, Ga.—The city has voted \$50,000 4½ per cent. 10-30-year water, light and sewer bonds.

Marlington, W. Va.—No satisfactory bids were received September 20 for the \$7500 of 6 per cent. 20-year street-improvement bonds offered September 20.

Memphis, Mo.—Bids will be received until 1 P. M. October 15 by S. A. Hammond, County Treasurer, for \$50,000 of 4 per cent. Scotland county courthouse bonds.

Murray, Ky.—On November 5 an election is to be held to vote on \$19,500 of 5 per cent. 5-20-year water-works and electric-light bonds. These bonds are to take the place of the 4 per cents voted some time ago.

Nashville, Tenn.—The election October 10 to vote on \$650,000 of 6 per cent. 30-year electric-light, sidewalk and water bonds failed to carry. T. O. Morris is Mayor.

Newbern, N. C.—An issue of \$50,000 of street-improvement bonds has been voted.

Pawnee, O. T.—N. D. McGinlay is reported to have been awarded at 100.05 \$20,000 of 6 per cent. 30-year water-works bonds.

Prague, O. T.—On October 21 the city will vote on \$30,000 of water-works bonds.

Rocky Mount, N. C.—The \$155,000 of 5 per cent. 40-year water, light, street and school bonds offered September 1 were not sold.

Royse City, Texas.—Reports state that on September 27 the city voted \$15,000 of water-works improvement bonds.

Rutledge, Ga.—An election is to be held

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